Canadian and U.S. Adjustment Policies in a Bilateral Trade Agreement

Ronald J. Wonnacott

with Roderick Hill

Canadian-American Committee

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87-06470/

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Philip Briggs
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Library of Congress Catalog Card Number 87-62309
ISBN 0-89068-093-0

C.D. Howe Institute (Toronto, Ontario) and
National Planning Association (Washington, D.C.)

Printed and bound in the U.S.A.
September 1987, U.S. $15.00

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Foreword

Canada and the United States are attempting to negotiate a historic free trade agreement. In *Canadian-U.S. Trade Options,* the Canadian-American Committee identified the economic benefits to both countries of achieving a more open and stable environment for commercial relations through a comprehensive agreement.

The elimination of tariffs and many nontariff barriers to bilateral trade in goods and services would promote a more efficient allocation of resources and improve the living standards and employment opportunities of most North Americans. However, as with any kind of economic change with the potential to enhance the general well-being—e.g., improvement in production technology, product innovation or change in the commercial environment established by government policies—some firms and workers would be adversely affected by the adjustments necessary to achieve such change.

On grounds of both equity and efficiency, a strong case can be made for providing assistance to workers who lose their jobs as a result of a Canada-U.S. free trade agreement. Such assistance is a way of ensuring that those workers who suffer from the implementation of a free trade agreement would have the opportunity to share in the societal gains. Moreover, aids to promote job training and mobility help ensure that those workers continue to contribute to overall prosperity.

This study by Ronald J. Wonnacott, Professor, University of Western Ontario, with Roderick Hill, Lecturer, University of Windsor, examines these issues as well as the various means that U.S. and Canadian governments have employed to assist workers adversely affected by trade liberalization. In implementing a trade agreement, Professor Wonnacott recommends that the two governments give serious consideration to providing temporary wage subsidies to: workers laid off in congested labor markets who move to areas with better employment opportunities, and workers who move to new industries or occupations that pay lower salaries. As these benefits would be available to many workers and industries, and since they promote the more efficient employment of labor, they should be placed beyond the reach of countervailing duties.

The author also stresses the need for the phasing out of tariff cuts and the temporary suspension of tariff reductions to offset the effects of substantial import surges.

Professor Wonnacott has undertaken a useful analysis of the specific problems that would be faced by workers in the implementation of a trade agreement. Publication of this report by the Canadian-American Committee does not imply that all the members endorse all of the author's findings; however, the Committee believes his suggestions to

address the worker adjustment problems are worthy of consideration by the negotiating teams.

Philip Briggs

PHILIP BRIGGS
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Abbreviations and Acronyms

AAB	Adjustment Assistance Benefits (Canada)
BFT	bilateral free trade
BIDP	Business and Industrial Development Program (Canada)
BSC	British Steel Corporation
BTA	bilateral trade agreement
CEC	Canada Employment Centre
CEIC	Canada Employment and Immigration Commission
CIRB	Canadian Industrial Renewal Board
CIRP	Canadian Industrial Renewal Program
CMA	Canadian Manufacturers' Association
CMITP	Canada Manpower Industrial Training Program
CMP/CMMP	Canada (Manpower) Mobility Program
CMTP	Canada Manpower Training Program
CTST	Critical Trades Skills Training (Canada)
DRIE	Department of Regional Industrial Expansion (Canada)
EC	European Community
ECC	Economic Council of Canada
ECSC	European Coal and Steel Community
EDA	Economic Development Administration (U.S.)
EDP	Enterprise Development Program (Canada)
ES	Employment Service (U.S.)
GAAP	General Adjustment Assistance Program (Canada)
GATT	General Agreement on Tariffs and Trade
GIT	General Industrial Training (Canada)
IAS	Industrial Adjustment Service (Canada), originally called Manpower Consultative Service
ILAP	Industry and Labour Adjustment Program (Canada)
IRDP	Industrial and Regional Development Program (Canada)
ITC	International Trade Commission (U.S.)
JTPA	Job Training Partnership Act (U.S.)
LAB	Labour Adjustment Benefits (Canada)
MFA	Multi-fiber Arrangement
MFN	most favored nation
MILAP	Modified Industry and Labour Adjustment Program (Canada)
MITI	Ministry of International Trade and Industry (Japan)
NCB	National Coal Board (U.K.)
NIC	newly industrializing country
NIT	National Institutional Training (Canada)
NTB	nontariff barrier
NTP	National Training Program (Canada)
OECD	Organization for Economic Cooperation and Development
OJT	on-the-job training
OMA	orderly marketing agreement

QR	quantitative restriction
SBA	Small Business Administration (U.S.)
SFP	Sector Firms Program (Canada)
TAA	Trade Adjustment Assistance (U.S.)
TAB	Transitional Assistance Benefits (Canada)
TCF(T)	textiles, clothing and footwear (and tanning)
UI	unemployment insurance
VER	voluntary export restraint
VRA	voluntary restraint agreement

Executive Summary

Bilateral free trade will enhance job and profit opportunities and improve income prospects in Canada and the United States. But firms and workers in both countries face competitive challenges in adjusting to an open bilateral trading environment.

Adjustment in Perspective

The adjustment pressures from bilateral free trade need to be put in perspective relative to other adjustments that will take place in any case as a result of the following factors:

- Domestic economic shocks, such as changes in technology or consumer tastes.
- Foreign shocks, such as the increased competition from Japan in high technology products; from Brazil and the other newly industrializing countries (NICs) in heavy industry, such as steel; and from less advanced countries like China and the Philippines in light industry, such as textiles. The Tokyo Round of trade liberalization has increased the impact of these shocks on Canada and the United States by opening our borders to increased overseas competition.
- Shocks from macroeconomic pressures in the United States where remarkably large fiscal deficits have, in substantial degree, been financed directly or indirectly by an inflow of capital from third countries. In turn, under a flexible exchange rate, this capital inflow has generated a large U.S. trade deficit along with distress and unemployment in its export and import-competing sectors. This situation has led to calls for protection and a charged political atmosphere that make it more difficult for the United States to take the initiative in liberalizing trade. It is therefore important for U.S. fiscal deficits to be reduced in order to (1) decrease unemployment in U.S. trade-related sectors and thereby reduce the cost of the additional switching of employment that would result from bilateral free trade, and (2) provide the United States with more budget elbowroom to afford adjustment assistance programs. This second point also applies to Canada whose budget deficit is, in relative terms, even larger.

In comparison, how serious will the adjustment to bilateral free trade be? The answer is that there will probably be considerable adjustment, but most is likely to occur *within* sectors rather than between them, thus making the adjustment a more positive experience. Firms will develop new products and marketing capabilities to take advantage of new trading opportunities. Moreover, the best estimate is that the Canadian adjustment to bilateral free trade would be less than is commonly expected because the job creating effects of reductions in U.S. trade barriers would lead to a positive net overall impact of bilateral free trade on Canadian employment.

The estimated gain in employment by Canada does not imply a loss to the United States. Historical experience suggests that free trade tends to increase employment in participating countries, with perhaps the best indirect evidence coming from the Great Depression in the 1930s when rising levels of protection were a major reason for falling employment. Moreover, bilateral free trade may well have a positive effect on manufacturing employment in both countries precisely because it would be a *bilateral* agreement; the preference in its market that each country would grant to the other would tend to stimulate industrial exports by each. (Since this would be at the expense of third countries, the importance of this influence would depend upon the degree to which Canada and the United States may compensate these third countries by giving them freer access to North American markets.)

The conclusion is that, although there would be shocks from a bilateral free trade agreement, they are likely to be less than commonly predicted because of the favorable employment opportunities such an agreement would tend to generate in both countries.

The next question is: how would the shocks from bilateral free trade compare to the other foreign shocks, the domestic shocks and the macroeconomic shocks that we will have to face in any case? An important way that many of these other shocks are transmitted is via the system of flexible exchange rates. The current typical exchange rate fluctuations of sometimes 10 or 20 percent in a few *months* have a more profound effect on the competitive position of industries in Canada and the United States (and thus on the pressure to adjust) than would a planned, phased reduction in bilateral tariffs of at most 1–2 percent a *year*. In other words, the adjustments we have to face with or without a trade agreement, and which we have been experiencing through exchange rate fluctuations, will almost surely be more severe and unexpected than will the adjustment to bilateral free trade. Moreover, adjusting to bilateral free trade will increase our ability to adjust to the other shocks in the future. And that should be our ultimate goal in a world in which changes are occurring at an increasingly rapid rate: to develop an economy that will adjust to shocks from any source. The adjustment to bilateral free trade should be viewed as simply one step in the process.

The other major consideration in getting this adjustment in perspective is that it is likely to be much less than the adjustment Canada will have to face if there is no bilateral free trade agreement. In that case, Canada may confront a problem that is many times as severe—namely, the adjustment to increasing U.S. import restrictions. The direct effect of such restrictions is that markets would be lost, with none gained. Therefore, the adjustment would have to take place in a situation in which there would be downward, rather than upward, pressure on Canadian employment.

Rationale for Government Assistance

The most important adjustment mechanisms operate within firms and labor markets. Thus, for example, as trade is liberalized, rising wages and employment opportunities in expanding export sectors draw labor and other resources from contracting import-competing sectors. The rationale for government adjustment assistance is:

- *Efficiency.* In some instances the market does not operate efficiently, and government action can improve its operation. For example, retraining subsidies are justified by the underinvestment that typically occurs in the accumulation of human capital.
- *Equity.* It is only fair that some of the net benefits to society from bilateral free trade should be used to reduce the costs of individuals who are dislocated.
- *Political efficacy.* It may be difficult if not impossible to sell a program of liberalized trade if adjustment assistance programs are not in place. As an obvious example, a policy of trade liberalization cannot be sold unless tariff reductions can be phased in over time. Protection is temporarily continued to provide business and labor with breathing space and an opportunity to adjust to the new set of circumstances. As a further illustration, a policy may, in the absence of adjustment assistance programs, be rejected by a population even though 90 percent of its members would benefit. Such rejection would occur if, for example, each individual is risk averse and assumes that he or she will be one of the 10 percent who loses. In this case, the government can introduce the beneficial policy if it also provides appropriate adjustment assistance to cover the population against undue risk. Moreover, the cost of this assistance need not be high because in the actual event, only 10 percent of the population would draw on it.

Conflict Between Equity and Efficiency

In the design of adjustment policies, the objectives of equity and efficiency often conflict. For example, income to the displaced provided for equity reasons may reduce efficiency by damaging the incentive to adjust: the closer an income grant comes to approaching an unemployed individual's normal employment income, the less incentive is left for that individual to seek a new job. A key question in designing any adjustment policy is: how can relief be provided in a policy that *helps* rather than hinders adjustment? This is why subsidies to cover retraining and relocation costs that offer both relief and assist the adjustment process are favored ahead of additional income supplements (above unemployment insurance) that give relief but may deter adjustment. (One of the later chapters in the study suggests how income supplements may indeed be provided in a subtle way that could encourage rather than deter adjustment.)

Should Adjustment Assistance Be Focused on Firms or on the Labor Force?

For a number of reasons, adjustment is easier for firms than for labor; hence, adjustment assistance from the government is less necessary for firms than for labor. For example, firms are more likely than workers to have the collateral assets necessary to borrow to cover adjustment costs; and firms generally have better information about alternative opportunities in different lines of production in different locations. Moreover, it is often easier for firms than for workers to shift to other activities. To illustrate, in a phased move to bilateral free trade over 10 years, a firm may be able to shift into another line of production simply by reinvesting its depreciation allowances; in this case, it faces no sunk costs. There is no similar way in which labor with a large investment of its human capital in a specific job can finance its move into another activity; labor *does* face a sunk cost of human capital. Another consideration is that the firm's owners (shareholders) have less cost in any adjustment process because, by diversifying their portfolios, they typically are able to spread their risks in a way that is not possible for labor with its concentration of human capital in one activity.

It is not only less necessary to provide adjustment assistance to firms than to workers, it is often more difficult. One reason is that any government policy subsidizing firms that are "winners" may violate bilateral free trade commitments not to subsidize exports. Such problems faced by a government in subsidizing winners will tend to add to the already substantial pressures on the government to provide assistance to losers, perhaps in a bail-out policy.

But a bail-out policy involves problems.

(1) If the firm remains in trouble, its first bail out tends to lead to another because of the political difficulty the government must otherwise face in admitting that the first bail out was a mistake.

(2) Once the government admits that it is prepared to use taxpayers' money to bail out firms in difficulty, entrepreneurs may tend to take too many risks, in a strategy of "heads I win, tails the taxpayer loses."

(3) Bail outs tend to be inequitable because the largest firms can mount the strongest case for support; the secondary and tertiary effects that ripple through the economy will be more substantial and damaging if the failing firm is a large one.
(4) One specific bail-out policy—the loan guarantee—increases the leverage of firms that typically are already suffering from too much. Moreover, in a loan guarantee the government is less accountable than in a straight grant; indeed, a loan guarantee may be viewed as a way that the present government can push the problem of financing a failing firm onto a future government.

For all these reasons, the only appropriate bail-out policy is "don't do it." The government must publicly follow this policy—even though the government recognizes that it may have to make an exception in certain circumstances. However, it is important in any such exception to avoid setting a precedent by making the circumstances justifying the bail out so detailed and unique that no firm in the future could possibly fit the conditions.

It is also important for the government to make clear that, if a bail out does take place, stockholders and management would be automatically "stripped" to ensure that these two groups always face the full "bankruptcy risk," and therefore do not have their incentives distorted toward excessive risk taking. For the same reasons we could argue that the appropriate objective should also be to force suppliers and creditors of any troubled firm to face the full risk of its bankruptcy to prevent them from extending excessive credit to such a firm. Unfortunately, this objective cannot be fully achieved because it would touch off the damaging secondary and tertiary ripple effects throughout the economy that the bail-out policy is designed to avoid.

Design of Adjustment Assistance for Labor

On equity grounds, an adjustment assistance program for labor should be generally available and not targeted just to workers displaced for reasons of trade. Another argument for general availability is that it is very difficult to distinguish between unemployment that is trade related and unemployment that is not; and workers who are unemployed for other reasons will seek trade-related relief. However, a generally available program may not be affordable; in that case, it may be necessary to target assistance.

Specific adjustment policies that should be given serious consideration include early retirement, increased pension portability, and tax-free status for severance pay.

In addition, the study discusses a portable wage subsidy that would provide an incentive on both sides of the labor market—to employers and employees—for better matching the unemployed to job openings. This subsidy would be offered to those who have to change location; by reducing geographic immobility, it would increase the efficiency of the labor market. The portable wage subsidy would also recognize that shifting locations involves an additional set of economic and noneconomic costs that cannot be covered by standard relocation grants—not the least being a possible loss in housing assets. A second tier of the subsidy would be payment of one-half the gap between the old and new wage levels for those who switch industries or occupations. By reducing interindustry and interoccupational immobility, this second tier would also increase labor market efficiency. In addition, it would provide partial compensation for the income cut that labor typically faces when it has to apprentice in a new job.

The hope is that such a wage subsidy would not be necessary. But in any case, further study is required, especially on the broad question of affordability. The analysis of this wage subsidy program in the current study is intended to show how such a policy should be designed with the right set of incentives. The approach is similar to the extended study of how the right set of incentives should be incorporated into a negative income tax—an interesting and productive study even though the question of the affordability of this policy remained unresolved.

Protection as an Adjustment Policy?

The key consideration here is that any protection designed as an adjustment assistance policy *must be temporary* so that it provides the economy with time to adjust without removing the incentive to adjust. In other words, it must avoid the problem of deterring adjustment that arises whenever protection is permanent.

Although temporary protection delays the move to trade liberalization and the real income gains that may thereby be achieved, it may reduce the costs of adjusting in several ways. First, it is often easier for a worker to get a new job if he or she still has the old one, and temporary protection may allow individuals to remain longer in their old jobs. Second, if a rapidly growing economy is moving toward liberalized trade, temporary protection in the form of, say, a 10-year phase-out of trade barriers may make increased specialization in export sectors possible without any absolute decline (or adjustment) in import-competing sectors. This could happen, for example, if the export sectors expand by absorbing all the economy's new resources and do not draw any resources from import-competing sectors. It is even possible that there could be little or no adjustment cost even if the import-competing sector *does* decline in absolute terms if that decline is limited to depreciation allowances and the natural attrition of the labor force from retirement and other causes. Even further reductions in employment in the import-competing sector may be possible with little or no cost if they are limited to the mobile margin—that is, those workers who are willing and able to move without incurring substantial economic or noneconomic costs.

A phased reduction in tariffs may take several forms. Because the adjustment will be more substantial in Canada than in the United States, it may be desirable to phase out Canadian tariffs less rapidly than American. This could be done in a way that is at least formally symmetric by having each country cut its existing tariffs each year by the same number of percentage points, say 1 percent, or by one-tenth of their initial level, whichever is greater. Because the U.S. tariff is now lower, it would disappear more quickly. Another approach would be to time tariff cuts to currency depreciation. This would make bilateral free trade politically more acceptable because the competitive position of the domestic industry would not be weakened when tariffs are being cut. In addition, of course, there is GATT Article XIX safeguard relief for industries that temporarily find themselves in highly distressed situations.

Should auto-type production safeguards also be considered? The answer in this study is no. For a number of reasons these safeguards would be neither feasible nor acceptable, even if they were strictly temporary. Moreover, given the other forms of relief that are available, they should be unnecessary. Finally, they would be inferior to the completely different policy of safeguard relief described in the study. This policy would allow a country whose imports from partner increase by more than a certain (say 10) percent of its domestic market in a calendar year to restore for the balance of that year some or all of the bilateral tariff cuts it has already made under the bilateral free trade agreement. While this is formally a completely symmetric measure available equally to Canada and the United States, in practice it would provide Canada with more protection because Canada faces greater risks of dislocation under bilateral free trade. Thus, this policy would calibrate the degree of protection for each country to the degree of risk that it would face. Moreover, unlike the auto safeguards, this policy would be strictly temporary because it would automatically phase itself out. This policy is presented in detail, not because it is recommended—indeed, the hope is that available measures (such as Article XIX relief) would make it unnecessary—but to ensure that the highly contentious auto-type safeguard measures that Canada has used in the past will not be contemplated.

A final desirable measure would be for each country to exempt imports from partner from Article XIX action if the partner is not the major cause of injury. This would conflict with the present U.S. view that safeguards should be applied equally, on a most favored nation basis, to all trading partners. However, there is an entirely different and consistent view of safeguards that the United States could take that would not conflict with the Article XIX exemption recommended here; this is the view that a safeguard tariff should be treated exactly like an ordinary tariff. It should be MFN unless the two countries are going via Article XXIV to a free trade area agreement that requires elimination of duties.

Conclusions

Three major messages of this study deserve special emphasis. First, the most important mechanisms for adjusting to the challenges of more open bilateral trade operate within firms and the labor market. Second, the market does not work perfectly, and thus government adjustment assistance policies may be justified. Third, in designing adjustment policies, it is essential to build in the right incentives, to ensure that these policies will *promote* rather than inhibit the adjustment process.

Acknowledgments

Peter Morici and Murray Smith made extremely helpful comments on the manuscript, as did Tom Courchene, Harold Crockell, Glenn Jenkins, Surendra Gera, Richard Lipsey, John Mutti, Michael Trebilcock, John Whalley, and Paul Wonnacott. We are grateful to Jean-François David, Don De Jong, Pierre Leclerc, and Jenny Speir of Employment and Immigration Canada, who provided useful criticism of Chapter 4 and Appendix A; we should also like to thank Christopher Hankins and Robert W. Bednarzik of the U.S. Department of Labor for their helpful comments. We wish to record a special debt to Kenneth Taylor and William Eberle for their comments and assistance in the development of this material. Finally, we greatly appreciate the many suggestions we received from a number of other members of the Canadian-American Committee and members of their staffs.

1

Introduction*

A bilateral trade agreement (BTA) between Canada and the United States would create substantial long-term benefits;[1] however, it would also create adjustment costs for dislocated workers and firms on each side of the border. In this study, we examine various adjustment assistance programs. How necessary would they be? Which of these programs would be most useful in bringing about an efficient transition and ensuring that those who are adversely affected by a BTA have an opportunity to share in the gains?

Adjustment—the shifting of labor and other resources into other activities—has always been a key requirement in a growing economy, and it is even more so today. In a BTA, there would be a new set of adjustment pressures, that is, competitive challenges that would have to be met above and beyond the competitive challenges the two countries already face. The challenges raised by a BTA are examined in Chapter 2; but first the stage is set in this chapter by an examination of the other pressures that are now forcing adjustment on the two countries. Most of our future adjustment will be a response to these other challenges; they will exist whether or not Canada and the United States negotiate a BTA.

Domestic Competitive Challenges that Canada and the United States Face

The popular view that the big adjustments confronting each country are forced upon us by foreign competition is seriously

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*This first chapter draws heavily on three highly recommended sources: Richard Lipsey's Lecture to the General Meeting of the North American Economics and Finance Association on "American Commercial Policy and the Crisis in the World Trading System" (mimeo, 1987); Peter Morici, *The Global Competitive Struggle: Challenges to the United States and Canada* (Toronto and Washington: Canadian-American Committee, 1984), Part II; and Murray Smith, "Multilateralism, Bilateralism and Unilateralism in U.S. Trade Policy" (New York: Council on Foreign Relations, Working Paper, 1987).

[1] Although specific examples of the benefits of a BTA will be cited in the course of this study, no attempt will be made to provide a full description and assessment of its long-term benefits to the two countries. This would be a study in itself, which would take us well beyond our mandate. However, such a broad assessment can be found, for example, in Harris and Cox (1983), Wonnacott and Wonnacott (1967 and 1982), or in Canada, Macdonald Commission (1985), Vol. 1.

inadequate. Much of the adjustment we require is in response to *domestic* pressures. Dramatic new increases in supply from newly established firms put producers under pressure to adjust. New products replace obsolete ones as consumers' tastes change or as technological change makes products available for the first time. Just as important may be innovations in production processes. Microelectronic innovation has dramatically increased computer capacity, which in turn has revolutionized computer-aided manufacturing systems. Moreover, adjustment is required as traditional materials are replaced by new ones. Fiber optics are replacing copper, while carbon fiber products are replacing metals in aircraft design and may soon do so in automobiles and buildings. New heat resistant ceramics may revolutionize auto engine design.

Thus, there are large domestic challenges that must be faced, no matter what happens on the international front. But there are large foreign challenges as well.

Foreign Competitive Challenges

Dramatic improvements in the technology of communications and transportation have led to significant increases in the volume of international commerce. Compared to a few decades ago, foreign producers are no longer "at a distance." Instead, figuratively speaking, they are "at our doorstep," offering their highly competitive products. This provides enormous benefit to the North American public that can now choose from a much wider variety of products, often at a lower price. But it raises adjustment problems for North American producers who must compete.

This increased foreign competition has taken several forms.

(1) Highly developed, high income countries, including Japan and a number of nations in Europe, have developed a capacity to innovate that allows them to compete in the most advanced and sophisticated products.

(2) The newly industrializing countries (NICs), including South Korea, Spain and Brazil, are now challenging North American producers in many basic heavy manufacturing industries such as autos and steel. For a country like Brazil that has financed much of its dramatic development by international borrowing, the heavy payments it now faces on its debt increase the pressure on it to export more, and this raises the level of its competitive challenge. Just as Japan has traditionally had to be hyper-competitive in manufactured goods to finance its unavoidable resource requirements, now some of the NICs like Brazil must become hyper-competitive in manufactured goods in order to service their debt.

(3) Many developing countries, like Malaysia, the Philippines and China, are shifting toward labor-intensive light manufacturing such as textiles. In particular, the recent revolution that has been moving Chinese agriculture toward a private market system—a revolution that now may be copied in other socialist economies—has increased agricultural productivity enough to allow the Chinese to turn more of their attention to manufacturing. It may also allow them to reduce their imports of agricultural goods. Any such reduction in demand from a large traditional market for food would put further pressure on the world's already oversupplied markets for agricultural products. Thus, recent developments in China raise a competitive challenge for North American producers of both manufactures and agricultural products.

To sum up so far, North American producers have had to adjust to technological change, design and product innovation, and increased supplies from both foreign *and* domestic competitors. One of the best examples is in the U.S. steel industry, where increased competition for traditional producers has been coming from domestic mini mills as well as from developed and developing foreign countries.

Moreover, the foreign challenge has been increased by the trade liberalization that has taken place.

The Challenge of Multilateral Trade Liberalization

In the Kennedy and Tokyo Rounds, participating countries have reciprocally opened their markets to foreign competition. Net benefits to the public in North America and elsewhere can be attributed to an increased ability to export and to buy a greater variety of imports at lower prices. But this has created a challenge for the North American industries that must meet the competition from increased imports and, more generally, has raised an adjustment problem in the form of a necessary shift of resources from import-competing to export industries. True, this adjustment has been resisted in a number of countries that have replaced falling tariffs with nontariff barriers (NTBs). However, the pressure to adjust will be intensified again if the current Uruguay Round is successful in liberalizing trade further.

Multilateral trade liberalization has raised a special adjustment challenge for Canada. As Canadian trade barriers have been reduced in the Tokyo Round, import competition has become more severe. It is true that at the same time foreign trade barriers have been reduced, but often not by enough to allow Canadian industry to rationalize fully, that is, to invest heavily in setting up specialized production for high-volume foreign sales, and through economies of scale to reduce costs. The reason is that such rationalization requires assurance of free access to foreign markets—and those markets are not perceived as assured as long as some tariff and other trade barriers remain. In short, the large investments for rationalization in Canada to reduce costs require a degree of security of access to foreign markets that has not been provided by multilateral tariff cuts. Thus, the Tokyo Round of reductions in trade barriers has been sufficient to expose Canadian industry to a more intense degree of import competition without allowing Canadian industry, through full rationalization, to cut costs enough to achieve its export potential. Hence, one of the major incentives for Canada in the current bilateral negotiations with the United States is to provide security of access to Canada's largest export market, which would allow the cost-cutting rationalization in Canada that would make many of its industries internationally competitive.

Macroeconomic Pressures

In addition to the competitive challenges described above, a new one has been added in the 1980s in the form of the adjustment that has been required in response to a set of macroeconomic stresses. These have arisen because Canada and the United States have been running fiscal deficits that are, by historical standards, exceedingly large. While the Canadian deficit is, by any domestic yardstick, certainly serious, the U.S. deficit has a far more significant effect on the international trading system. Accordingly, it deserves special attention.

The U.S. Fiscal Deficit

The large U.S. fiscal deficits of the 1980s have been financed only in part by U.S. domestic savings. To a great extent, they have directly or indirectly been financed by imports of capital from abroad—in particular by imports of capital from Japan. That country has had, in many respects, the mirror-image situation of the United States: Japanese savings have been so high that by 1986 they had driven Japanese interest rates to low levels and had driven price/earnings ratios on the Tokyo stock exchange to, by our standards, an astronomical average of about 50:1; and in 1987, they went even higher. This has left excess Japanese savings searching for alternative investments elsewhere, such as in the United States where, because of a shortage of savings to finance business investment and a large fiscal deficit, real interest rates have been relatively high. The United States has also become a more attractive place for foreigners to invest because of its relatively rapid rate of growth (due to the expansionary "Keynesian" effects of a large budget deficit plus some supply side incentives). Another reason for foreign investment in the United States is that it is increasingly viewed as a "safe haven" for funds—especially compared to the less developed countries (LDCs), whose political stability in the face of IMF requirements for austerity has become a major concern. Accordingly, there has been an inflow of capital into the United States from Japan and other countries.

Under the current system of floating exchange rates, a country's currency will adjust until its net inflow of capital is roughly offset by a trade deficit.[2] In the United States in the early 1980s it was easy to see this mechanism at work. The U.S. capital inflow represented, for example, the purchase of U.S. dollars by Japanese savers so they could buy U.S. bonds with their relatively high real return. These Japanese purchases of the U.S. dollar drove its value up. This made U.S. exports and import-competing products more expensive in competition with foreign products, and falling U.S. sales of these products resulted in the U.S. trade deficit.[3]

The U.S. Trade Deficit

This has been damaging for two reasons.

(1) Many Americans have failed to recognize adequately that the U.S. trade deficit has been caused, in large part, by the fiscal deficit, and cannot be cured without dealing with that deficit. That failure has led them to recommend the greater use of trade remedy actions to

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[2] More precisely, until its capital account surplus (its net inflow of capital) is offset by a current account deficit (i.e., its trade deficit adjusted for nontrade current transactions).

[3] Why has the decline in the dollar over the last two years not reduced the U.S. trade deficit? The standard answer is that there is a substantial time lag before the trade balance responds to depreciation, but it appears to be more than that. U.S. imports that are subject to quantity restrictions such as voluntary export restraints (VERs) can initially be expected to show very little response to dollar depreciation. The reason is that although more expensive foreign currencies shift the supply curve of U.S. imports to the left (i.e., reduce the sales that foreign firms would *like* to make in the U.S. market), this has no effect on *actual* sales as long as the VER quantity restrictions are still binding and have reduced sales even more. Despite dollar depreciation, some quantity restrictions on U.S. imports continued to be binding by mid-1987; in such products, one would expect that dollar depreciation would still not yet be affecting the volume of imports. Moreover, in some other products, serious irreversibilities may have resulted from the high value of the dollar in the early 1980s. The resulting high cost of U.S. products may have led foreigners (and Americans) to purchase less expensive foreign substitutes. If they have found that they prefer these substitutes, then they may not go back to the U.S. products when their prices come down. On the other hand, in many other products, quantity changes were occurring in response to the dollar depreciation so that by late 1986 the deficit was beginning to respond in real terms. However, because of the price effects of depreciation, it was not yet beginning to turn around in value terms. But the major point is this: as long as U.S. fiscal and private demands outrun the supply of savings and the United States is a large capital importer, the United States must run a current account deficit.

restrict imports.[4] But the main effect of such actions is not so much to cure the trade deficit as to change the value of the U.S. dollar until the trade deficit is once again roughly equal to the net capital inflow. Moreover, such action against imports raises risks for the whole international trading system because, of the three players on the international scene who are big enough to take the leadership in liberalizing trade, it has been the United States that has most effectively done so in the past, and the United States is the key to the future. It is far from clear what our progress may be in the Uruguay Round, in any case. But if the credibility of the United States as an advocate of liberalized trade is damaged by its actions against imports, it will be less able to take its traditional leadership role in the future, and the prospect of moving the world toward a more liberal trade regime—or of even preventing a retreat into more protection—could become very bleak. Moreover, any action to restrict imports by either the United States or Canada makes it more difficult for those two countries to arrive at a bilateral trade agreement. Thus, the problem is damage not only to the world trading system, but also to a more liberal trading regime in North America.

(2) The second problem raised by the U.S. trade deficit is that, by generating unemployment in U.S. export and import-competing industries, it has increased the cost to the United States of adjustment to the future expansion of world trade (that may, for example, follow the Uruguay Round). Expanding world trade means expanding U.S. imports and exports. The expansion of U.S. imports tends to put downward pressure on employment in the corresponding U.S. import-competing industries. But because of the trade deficit, unemployment already exists in these sectors, and their labor markets are already congested; thus, further unemployment will be at high cost in terms of, for example, increasing the duration of unemployment. Moreover, because the large trade deficit has also caused employment distress in U.S. export industries, much of the future employment that is created as U.S. exports expand may initially just reduce unemployment in U.S export industries, with few of the new jobs being available for the displaced in import-competing industries.

Other Problems Raised by Both the U.S. and Canadian Fiscal Deficits

The fiscal deficit is a larger proportion of GNP in Canada than in the United States. However, the major domestic problems it raises are moderated because the savings rate (which helps to finance this deficit) is greater in Canada than in the United States. Moreover, because of Canada's smaller size, its fiscal deficit does not generate the same pressures on the international economy. Nonetheless, in negotiating bilateral free trade (BFT), the Canadian fiscal deficit does have two important implications that hold for the U.S. fiscal deficit as well.

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[4] U.S. trade remedy (countervailing and antidumping) laws are neither solid black nor solid white. On the one hand, they have the desirable effect of discouraging other countries from engaging in trade-distorting practices (export subsidies and dumping). But on the darker side, these laws may be used as protectionist devices. For more on these laws, see Smith (1987) and Paul Wonnacott (1987a).

- *It tends to crowd out other government policies such as adjustment assistance.* Because of their large fiscal deficits, neither the U.S. nor Canadian government can afford the adjustment assistance package that would otherwise be possible. Trade Adjustment Assistance (TAA) in the United States has been cited as one example.
- *It has reduced our capacity to deal with future recessions.* The second problem with the large U.S. and Canadian fiscal deficits is that they have reduced—and indeed may have essentially eliminated—the elbowroom each country has to fight a future recession. The question is not whether we will have another recession, but when. At that point, the deficit will increase automatically without any change in government policy, as tax receipts fall with GNP and safety net expenditures increase. How then can the government fight the recession by policy changes that will increase the deficit even further? Thus, large fiscal deficits will put severe restraints on the authorities in each country in their attempts to prevent a future increase in unemployment. Such an increase in unemployment will involve not only the standard cost of lost national output that could otherwise be produced. It will also, in the context of this study, add to the congestion in labor markets and therefore increase the cost of adjusting to changing trade patterns; and it will make negotiating further trade liberalization more difficult.

Conclusions

There are already a number of competitive challenges that are forcing adjustment on Canada and the United States. The list is a long one and, faced with challenges on so many fronts, the question arises as to whether we should even try to adjust. Why not opt out, forget adjustment and the growth it provides, and hang onto what we now have? The answer is that this is simply not an option. Without adjustment—without response to competitive challenges—it is unlikely that we can even maintain our present income level, let alone keep pace with other countries that are responding to the international challenge. Any attempt to insulate ourselves from foreign competition would require higher and higher levels of protection and would simply delay the moment of truth when the only way we would any longer be able to compete with foreign firms would be through a major depreciation in our currency, with the fall in relative income this implies. Competitive challenges must be met; adjustment pressures must be faced.

The next chapter turns to the new competitive challenge—the adjustment to a Canada/U.S. BTA. But before addressing this question, it must be emphasized that any policies to deal with adjustment in a BTA must be designed to assist both countries also in adjusting to the domestic and other international challenges that have just been described.

2

Competitive Challenges in Adjusting to Canada/U.S. Free Trade

In a world in which many competitive challenges have to be met, another is now under negotiation: a Canada/U.S. free trade agreement. In this chapter we consider how much adjustment this would require; and why a successful adjustment to North American free trade could put the United States and especially Canada in a much stronger position to adjust to the other competitive challenges described in Chapter 1.

To address the issue of how much adjustment would be required by bilateral free trade, we concentrate on the employment effects of this policy. It is true that, with BFT, both labor and capital may be displaced and have to be reallocated. But we concentrate on labor because a major shift of labor into or out of an industry acts as a good proxy for the shift in other resources as well, and because estimates have been made of how BFT may affect employment.

However, before examining the short-run employment effects of BFT, it is important to emphasize that the major incentive for BFT is to increase the *quality* rather than the quantity of jobs, that is, to increase productivity and income rather than employment. In this respect, trade liberalization is like technological change; even if it were to have no favorable effects on the number of jobs, it could still be justified by the improvements it would offer in the quality of jobs and the incomes they would generate. Moreover, trade liberalization, like technological change, will increase both countries' ability to create high income jobs in the long run because it will keep the economy competitive. A less competitive economy would be less capable in the long run of generating such jobs.

While a change in the long-run quantity of high income jobs is one of the key issues in assessing the benefits of bilateral free trade, a change in the short-run quantity of existing jobs plays an important role in assessing how much adjustment may be necessary.

What Would Be the Effects of BFT on Canadian Employment?[1]

BFT with the United States would—

(1) Create downward pressure on Canadian employment because

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[1] The rest of this chapter draws heavily on Ronald J. Wonnacott (1986).

the reduction in Canadian trade barriers would cause some Canadian firms to lose sales in Canada to imports from the United States;

(2) Create upward pressure on Canadian employment because the reduction in U.S. trade barriers would allow Canadian firms to increase their sales in the U.S. market.

While these are the two employment effects that would follow from a move from Canada's present position to BFT, an agreement would also provide greater assurance that Canada's present employment picture will not deteriorate because of possible U.S. protectionist actions, some of which are now before Congress. Thus, the third and final effect of BFT on Canadian employment would be to—

(3) Reduce the downward pressure on existing Canadian employment that is likely if Canada does not take some initiative to reduce the U.S. application of restrictive measures against imports.[2] These can be very damaging to Canadians because Canada is the country that depends most heavily on exports to the U.S. market.

While all three of these effects will eventually be considered, we begin with a comparison of the first two. (Information on the *net* effect of these two is available, whereas there is little information on each individually.)

The Net Effects on Canadian Employment of Moving from Our Present Position to BFT (Effects 1 and 2 Combined)

Using several model specifications, Harris (e.g., 1985a, 1986) has examined the potential short-run effect of BFT on employment. In each case he concluded that the effect would be favorable. In a longer-run study in 1986, the Economic Council of Canada (ECC) also estimated that BFT would lead to a lower unemployment rate in Canada.[3] This favorable expectation about Canadian employment has

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[2] For detail on the problems that arise in trying to negotiate modifications in U.S. trade remedy laws, see Paul Wonnacott (1987a).

[3] In terms of the traditional Canadian view, this favorable result may seem surprising. According to that view, free trade would bring Canadian specialization in resources. Since resource extraction and processing tend to be more capital intensive than the rest of the economy, such specialization could put downward pressure on Canadian employment.

The presumption of increased Canadian specialization in resource industries is reasonable if only Canadian trade barriers are removed. Since Canadian manufacturing

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been further supported by two macroeconomic studies, one by Informetrica (Sonnen and McCracken, 1985) and one using the macroeconomic models of the University of Toronto Institute for Policy Analysis (Dungan, 1985). While these authors could not mount nearly as ambitious an attack on the subject as Harris and Cox or the ECC, their results are of interest because they suggest that the conclusion of increased employment from BFT tends to be robust, that is, it follows from a variety of model specifications.

The job creating conclusion of the studies cited above is also consistent with the 1980 results of a nationwide survey by the Canadian Manufacturers' Association on the question: "what would be the net impact on your company of Canada/U.S. free trade?" Of the roughly 1,000 firms that replied, one-third expected to contract, one-third expected no change and one-third expected to expand—with the last group made up, on average, of relatively larger firms. (Although that survey left the CMA opposed to BFT, events since then—in particular, the increase in U.S. protectionism—have led it to take a more favorable view.)

This brings us to the study by the Ontario Ministry of Industry, Trade and Technology (1985) that has been the source of the frequently quoted claim that free trade with the United States would put 281,000 jobs in Ontario at risk. In sorting Ontario industries into three classifications, the authors estimated that: (a) there are Ontario industries with 281,000 jobs that would be highly sensitive to a free trade arrangement with the United States because they now operate behind significant Canadian trade barriers and have low export orientation; (b) there are Ontario industries with 275,000 jobs that would be

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would no longer be protected, imports from the United States would increase. The result would be some decline in Canadian manufacturing, and thus increased specialization in resources. However, the issue is *bilateral* free trade, with U.S. trade barriers also being eliminated. Since U.S. barriers have been a deterrent to exports of Canadian manufactured goods, their removal would allow an *expansion* of Canadian manufacturing.

The net effect of these two conflicting pressures on Canadian manufacturing is not clear a priori. One of the most interesting aspects of a 1983 study by Harris and Cox—and an earlier 1967 study by the Wonnacotts—is that both lead to the conclusion that the net effect of these two pressures on Canadian manufacturing is likely to be positive: if BFT brings any change in the manufacturing vs. resource intensity of the Canadian economy, it is likely to be in the direction of increased concentration on manufacturing and decreased concentration on resources. In other words, Canada/U.S. free trade would bring Canada relief from the U.S. trade barriers that have made Canadians hew more wood and draw more water than we would have under BFT. Since the assumption that BFT would bring more Canadian specialization in resources is unjustified, so too is the traditional conclusion based on that assumption—namely, the conclusion that Canadian employment would decrease because resource extraction has a low labor intensity.

sensitive to free trade, but which have "demonstrated export strengths. . . . The trade performance of these sectors has improved in recent years with exports increasing at a faster rate than imports between 1978 and 1984. This record suggests that these industries should be able to continue to improve their penetration of the U.S. market with improved access"; and (c) there are less sensitive industries with 107,000 jobs that "should not experience difficulty in adjusting to increased import competition as a result of freer trade with the United States. At the same time, a number of these industries have shown export strengths and may be able to increase their penetration of the United States with improved access to this market." (All quotes are from page 4.) Thus, the study concludes that the domain of favorably situated industries (275,000 + 107,000 jobs) would, under Canada/U.S. free trade, exceed the domain of highly sensitive industries with low export orientation (281,000 jobs).

This study is quite consistent with the conclusion of the other studies cited here that BFT would be job creating. In particular, the 281,000 jobs in highly sensitive industries cannot be used out of context to support the claim that BFT would be job reducing. This is especially true because some of these jobs, for example in the textile, clothing and footwear (TCF) industries, are already at risk from third country competition no matter what policy Canada now follows vis-à-vis the United States; and one way of improving Canada's chances against third country competition might be to become increasingly competitive in North America. Moreover, the Ontario study examined existing tariffs and export/import performance, but did not take into account how industries might rationalize in response to free trade. Specifically, it did not consider the possibility that some industries in its "highly sensitive" category (a) might have favorable prospects. An example might be an industry that cannot now export because of U.S. trade barriers, but that might be a winner once U.S. barriers were removed and it was able to reduce its cost by scaling up to service the open U.S. market. Thus, the Ontario study is useful not so much as an index of the likely success of industries in rationalizing, but as an index of the industries that would be under the most pressure to rationalize. It may also be useful in the current negotiations in identifying—in the style of the U.S./Israeli free trade agreement—which industries need the longest period of interim protection.

The Employment Effects of Preventing Canada's Present Situation from Getting Worse (Effect 3)

In the view of the Canadian business community, this may now have become the most important effect of all. BFT is seen as a way of securing Canada's present trade, that is, of preventing the loss in Canadian income and employment that may otherwise occur from future U.S. restrictions on imports. This is critical because the Canadian economy is so dependent on trade with the United States. About 20 percent of Canadian GNP—and consequently a substantial percentage of Canadian jobs—is generated by exports to the United States.

An even more detailed estimate of how Canadian employment depends on exports to the United States has been made by R. Wonnacott (1986) in an input-output analysis of how present Canadian exports to the United States directly and indirectly affect the output and employment of each Canadian industry. Each $1 million basket of representative exports generates an estimated 15.9 jobs in Canada; hence, in 1984 total Canadian exports generated approximately 1,360,000 jobs in Canada. (When multiplier effects are taken into account, this figure increases by 50–100 percent; and it increases even further when the effects of increased output on investment are accounted for.)

While these jobs are now dependent on exports to the United States—and hence are sensitive to changes in U.S. trade policy—they, of course, will not all be lost if Canada does not get BFT. Only part of Canadian exports to the United States would be lost from any conceivable policy of U.S. protection. Moreover, some would be recaptured because of balance of payments adjustments—in particular, a fall in the Canadian dollar—and because of substitution between inputs as prices change—an effect not taken into account in an input-output analysis.[4] In addition, some of the export sales lost in the United States would be deflected into third country markets.

How many jobs might be lost in Canada if Canadian access to the U.S. market were to erode?[5] This depends on how much erosion takes place. Assuming a 20 percent U.S. surcharge on most manufactured goods traded by the two countries, followed by retaliation, the Economic Council of Canada (1986) estimates that by 1995 the Canadian unemployment rate would increase by 2.4 percent. In reality, one might expect smaller surcharges and thus a smaller employment effect. Nonetheless, the ECC finding is of considerable interest because it suggests that, in terms of employment, the larger benefit of BFT to Canada may come not from the gain in employment because trade barriers are removed, but rather from avoiding the employment loss that Canada may have to face in the absence of an agreement.

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[4] Like the Ontario study, this input-output analysis is an "impact study" in the sense that it does not take into account balance of payments adjustments, as does, for example, the Harris and Cox study (1983). However, in one important sense, this input-output analysis is broader than a typical impact study because it considers both direct and indirect interindustry effects.

[5] How serious is the threat of increased U.S. protectionism? With each passing year of large U.S. trade deficits, the pressure on Congress continues. So far, most of it has been deflected by the U.S. Administration, and in the near term it is possible that the Administration may, if necessary through a presidential veto, be able to continue to do so. But the question is how long a veto will remain sustainable, and how long it will be before the Administration begins to preempt congressional calls for protection with compromises that are less unreasonable, but still very damaging to Canada. Moreover, there is a substantial risk that the new U.S. Administration elected in 1988 may be less prepared to resist a protectionist Congress. The paradox is that, if Canada waits until U.S. protectionism becomes stronger (either in its present or some future manifestation), a bilateral trade agreement with the United States will become more and more imperative for Canada; but the terms Canada will be able to negotiate—such as measures to buffer temporary dislocation in Canada—will become less and less favorable, if indeed the United States remains prepared to negotiate at all.

The ECC estimates are also interesting because they include estimates of how the growth of real output would be affected. BFT is estimated to increase real Canadian output by 2 percent by 1995, while the protectionist scenario would reduce output by 5 percent. (Both are measured against a "no change in trade policy" projection of growth.) This more rapid rate of growth under BFT implies a much easier adjustment to shocks, domestic or foreign. In particular, as we will detail later, the costs of unemployment would be much less, not only because there would be fewer unemployed individuals, but also because the average duration of each individual's unemployment is likely to be reduced.

It is now broadly recognized that Canada requires an effective set of adjustment mechanisms to handle foreign or domestic shocks in any case. What is not so widely recognized is that this adjustment mechanism may become even more important *in the absence* of BFT because Canada may have to adjust to a bleaker employment picture.

We now turn to another important issue: even though the *net* employment effects on Canada of BFT may be positive, this policy would still require an effective adjustment mechanism to facilitate whatever switching of labor and other resources may be necessary between industries and within industries.

Switching of Canadian Employment from One Sector to Another

Grubel (1967) concluded that most of the switching between jobs in the formation of the European Community (EC) took place *within* industries, with relatively little between them. In their study of the possible effects of BFT on Canada, the Wonnacotts (1967) expected to find an incentive for large intersectoral shifts, but found none. In its projections to 1995, the ECC (1986) concluded that, while some previously protected industries will face adjustment problems, the output of all major sectors of the Canadian economy will expand. Harris (1986) arrived at the same conclusion in his study of the adjustment required of the Ontario economy. These studies are important because they project an adjustment that will be less costly because most of the labor that will switch jobs and most of the reallocation of capital will occur within sectors, rather than between them.

Nonetheless, some switching of labor and capital between sectors is to be expected. The question is how much? In a 29-sector analysis of the Canadian economy, Harris (1985a, p. 197) estimated that up to 7 percent of the Canadian labor force could be involved in intersectoral shifts in employment. If BFT is phased in over, say, 10 years, this implies that it would cause an average intersectoral shift in employment of less than 1 percent per year, a figure that has to be kept in perspective by noting the large shifts in employment that take place in the Canadian economy in any case. To illustrate, 25 percent of the employed Canadian labor force in 1985 had a job tenure of less than one year (OECD, 1986, p. 51).[6] Using 1980 data, an Economic Council of Canada study has estimated that about 4 percent of employed persons (i.e., about 440,000 individuals) separate from their jobs each month (Hasan and de Broucker, 1985, p. 6).

Although substantial gaps in knowledge remain, the conclusion for Canada seems to be this: the amount of job switching that results from BFT is unlikely to be anything like the magnitude of the job switching that takes place already. Moreover, little of the job switching under BFT will be in the relatively difficult form of switching between sectors. Finally, it is estimated that this switching will be in the context of increasing net employment opportunities created by BFT and therefore should be in less distressed labor market conditions.

The Problem of U.S. Branch Plants in Canada

Some Canadians have been concerned with what U.S. parent firms would do with their Canadian branch plants in the event of BFT. Would U.S. parents with excess capacity in their U.S. plants simply service the Canadian market by increasing their U.S. production runs by about 10 percent and pack up their Canadian branch plants? The answer is that if foreign firms were going to take this action, they would have done so in the early 1980s when trade was being liberalized and conditions were far more conducive to a mass exodus. At that time, high interest rates and the worst recession in 50 years provided an incentive for U.S. firms to close down and sell off some of their plants. Given their high levels of excess capacity in the United States, these firms could have elected to close down their Canadian operations. Yet as the Tokyo Round reduced Canadian tariffs, U.S. parents showed no dramatic tendency to do this. Moreover, the Tokyo Round brought multilateral liberalization, rather than the bilateral liberalization considered here. Of the two, bilateral liberalization should have more favorable effects because it would provide a special incentive for increased employment in manufacturing in both Canada and the United States. (This phenomenon would arise because each country would give the other preferential access to its domestic market in manufactures, an issue we will detail later in this chapter.) Thus, a key question is this: since trade liberalization in the far less favorable circumstances of the early 1980s did not lead to a dramatic exodus in Canadian branch plant employment to the south, why should this occur under BFT?

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[6] Note that the Harris estimate does not strictly compare with the OECD and ECC estimates: Harris' estimate covers only shifts between sectors, while the other two estimates include shifts both between and within sectors.

There are good reasons why many U.S. firms will not want to close down their Canadian plants. Because of lower (exchange-adjusted) wages in Canada, a U.S. firm that rationalizes its subsidiary in Canada may be able to produce at lower cost there than in one of its U.S. plants—even after rationalization costs are taken into account.[7] Moreover, during periods of normal economic growth, the question for many U.S. firms is: should our Canadian plant be rationalized or closed down in favor of building a new plant from scratch in, say, Kansas City? It is no great surprise that, as trade barriers fall, many U.S. parents continue to produce and employ in their Canadian subsidiaries.

What Would Be the Employment Effects of BFT on the United States?

There is a strong expectation that BFT would have a smaller employment effect in the United States than in Canada. The most obvious reason is that the percentage of current U.S. employment that is dependent on trade with Canada is far less than the percentage of Canadian employment that is dependent on trade with the United States. (As a proportion of GNP and employment, trade is less important to the United States than to Canada; moreover, U.S. trade is far less concentrated on Canada than is Canadian trade on the United States.) Another way of viewing this is that an equal increase in trade flows in each direction would have a relatively smaller effect on the large U.S. economy than on the small Canadian economy.

While there is no question that adjustment will occur in both countries as new trading patterns develop, relatively less of that adjustment is expected in the United States. To illustrate, consider the experience of a hypothetical and admittedly oversimplified firm that now produces 10 products in the United States and the same 10 products at lower volume and higher cost in a Canadian "miniature replica" branch plant set up to service the Canadian market. To sharpen the point, suppose that trade in these products does not yet exist between the two countries. Suppose further that with BFT the Canadian branch plant is rationalized, so that it specializes in one of these products, with its increased volume and lower cost making the product salable in the United States. Ninety percent of the Canadian firm's labor force will have to move out of its previous activity into producing the new specialty item. On the other hand, the U.S. parent will have to switch only 10 percent of its labor force out of this item of Canadian specialization and into its 9 other products, all of which will now be sold in Canada. In this example, a much larger proportion of the labor force has to switch in Canada than in the United States. The Canadian appliance industry contains some firms facing such adjustments.

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[7] For detail on how the competitiveness of Canadian production vis-à-vis that in the United States was improved during the 1970s due to rationalization in response to multilateral tariff reductions, see Baldwin and Gorecki (1986).

This sort of labor switching will not only occur within a firm, it will also tend to occur among industries as Canadian producers search out niches in the U.S. market. The basic point is this: U.S. adjustment to BFT will involve a much smaller percentage of the labor force than will Canadian adjustment, because U.S. employment will be relatively far less dependent on bilateral trade than will Canadian, and because Canadian products will, by and large, be sold in niches in the U.S. market while U.S. products will more likely be sold across-the-board in Canada.

As a brief aside, this oversimplified example provides insight into some of the reasons why Harris and Cox (1983) and other researchers have found BFT to be beneficial for Canada. Canadian consumers would benefit because they would be able to purchase all 10 items at lower cost—1 produced less expensively at home and the other 9 available as duty-free imports. But the biggest Canadian benefit would come from increased productivity. Specifically, because of increased volume and economies of scale in the item in which they would be specializing, Canadians would be able to produce at lower cost, that is, they would become more productive and would consequently earn higher real incomes.

So far, the conclusion about adjustment is that more is to be expected in Canada than in the United States. Moreover, an earlier section concluded that Canadian adjustment would be in the context of net upward pressure on Canadian employment. The question now is: would BFT bring net upward or downward pressure on U.S. employment? To our knowledge, no attempt has yet been made to estimate this. However, it is worth emphasizing that the conclusion that Canada will get a net employment gain from BFT does *not* imply that the United States will face a net employment loss. One reason has been noted: reciprocal trade liberalization tends to increase employment overall, just as reciprocal rounds of protection tend to decrease it, with the Great Depression providing the most convincing evidence on this score.

While there is evidence that multilateral free trade tends to increase employment, there is a strong theoretical expectation that *bilateral* free trade will increase it even more.

Increased Manufacturing Employment in Both Countries Due to the Exchange of Preferences

Bilateral (as opposed to multilateral) free trade might increase employment in manufacturing in the two partner countries at the expense of manufacturing in third countries. The reason is that each partner country would give the other preferential treatment in its domestic market vis-à-vis third countries such as France. For example, with Canada/U.S. BFT, the United States would give Canada preferential access to the U.S. market. Specifically, French exporters would still have to pay the U.S. tariff to sell in the U.S. market, but Canadian exporters would no longer have to pay this. Because tariffs are escalated—that is, higher on highly processed goods than on resources—this preference would be more important for manufactured goods and hence would stimulate industrial employment in Canada. Similarly, Canada would give the United States preferential access to the Canadian market, and this would stimulate industrial employment in the United States.[8] (Because these preferences would be at the expense of third countries, the importance of this influence would depend on how much Canada and the United States compensate third countries by giving them freer access to North American markets.)

We now turn to another question that is important in placing the adjustments to BFT in perspective.

How Significant Will Be the Adjustments to BFT Relative to Other International Shocks?

First, consider this from the point of view of Canada, the country that would face the more substantial adjustments under BFT.

Assuming a 5- to 10-year phase-out of bilateral trade barriers—a widely accepted policy that will be examined and recommended below—Canadian tariffs would fall by 1 or 2 percentage points per year. That is, the competitive position of Canadian industry would change by 1 or 2 percent a year. At the same time, we live in a world in which much greater changes in competitive positions are brought about by movements in exchange rates that sometimes reach 10 or 20 percent in a period of a few months. Moreover, the BFT changes can be planned for in advance because they are predictable. (Some adjustment, in terms of scaling up new Canadian investment, may even occur as soon as BFT is announced and before *any* tariff cutting actually takes place.) In comparison, changes in exchange rates often come with no warning. Even for those that are expected, the timing frequently cannot be predicted. (For years before its eventual fall in early 1985, the U.S. dollar had been expected to fall, but had kept on rising.) Since changes in exchange rates reflect the other shocks taking place in the international system, such as those in response to the macroeconomic imbalances described in Chapter 1, it is likely that these other adjustments would dominate any shocks required by BFT.

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[8] If the world were to move toward multilateral free trade, these preferences would disappear. Consequently, the manufacturing employment in Canada and the United States that may have resulted from these preferences would also disappear, in what has been termed the "double adjustment problem."

This conclusion—that BFT adjustments will be less than other adjustments—is even more likely to hold for the United States. The reason is that trade with its North American BFT partner has far less relative importance for the United States than it does for Canada.[9]

The Flexible Exchange Rate as an Adjustment Mechanism

The exchange rate provides not only a message of how serious adjustments in the international economy may be, but it also plays an important role as an adjustment mechanism. To illustrate, suppose that Canadian imports under BFT were to grow faster than exports. The Canadian dollar would decline, bringing import and export growth back into line. Hence, the more substantial adjustment that would be required if exchange rates were fixed is not, in fact, necessary because the flexible exchange rate acts as a first-line adjustment mechanism.

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9. For the United States there is some evidence that trade-related adjustment pressures have been outweighed by domestic sources of adjustment pressures such as changes in demand, technology or productivity. This evidence comes from empirical studies that attempt to estimate the proportion of the change in employment in particular industries that has been caused by trade shocks on the one hand, and domestic shocks on the other. Although these studies use different methods—some of which are not without methodological problems (Martin and Evans, 1981)—they give the same general impression. Trade shocks are often substantially outweighed by domestic shocks. See Frank (1977), Grossman (1982 and 1984), and a study for Canada by Robertson and Grey (1985).

For evidence that the shocks of increased supply from the NICs have been less important—at least in terms of displacing employment in the developed countries—than has been typically assumed, see OECD (1979) and Krueger (1980).

In any discussion of the exchange rate, a related issue arises. Could the United States reasonably argue in the present negotiations that the value of the Canadian dollar is below its "fundamental equilibrium value" and should be raised as a precondition of this agreement? This issue has been studied by John Williamson, arguably the leading expert on exchange rate equilibria. (See the Appendix by Williamson in Paul Wonnacott, 1987a.) Although his initial reaction was that the Canadian dollar might now be "too low," his conclusion after completing his research was that it is not. He judged that the fundamental equilibrium range for the Canadian dollar is U.S. 74¢ ± 10¢. Moreover, in his calculations, Williamson relied heavily on current account figures; and for several reasons Canadian and U.S. current account figures are biased or noncomparable in a way that suggests that the fundamental equilibrium range of the Canadian dollar may be even lower than Williamson estimated.[10]

It is, of course, quite possible that the Canadian dollar would rise as a result (rather than as a precondition) of BFT. This might well occur if the Canadian adjustment to BFT is a particularly successful one, with Canadian exports increasing faster than imports. This would indicate that increased efficiency would be allowing Canadian producers to compete even at a higher value of the Canadian dollar, and would thus be an indication of the success of BFT in increasing Canadian efficiency and income.

Concluding Observations: Keeping the Adjustment Required by BFT in Perspective

Although BFT would require adjustment in the United States, it would be less substantial than in Canada because Canada-U.S. trade is relatively far less important to the United States than to the Canadian economy.

There may be substantial adjustment required in Canada. Rationalization and specialization may cause a shift of labor between sectors over the 5- to 10-year period of trade liberalization estimated to be about 7 percent of the labor force, along with shifts within sectors. Such adjustments will be less severe insofar as they take place, as estimates suggest, in the context of increasing employment opportunities; as employment is reduced in import-competing sectors, even greater employment gains are estimated in export sectors.

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[10] For example, Canada and the United States treat retained foreign earnings in different ways. If Canada were to use the U.S. method, the Canadian current account deficit would be greater by roughly $4 billion.

If, under BFT, trade barriers are reduced over a substantial phase-in period, the adjustments may be less than those Canada has to face from the other trade-related and domestic changes described in Chapter 1. Moreover, Canada's ability to adjust over the longer term to these other competitive challenges will be enhanced under BFT because meeting U.S. competition will increase the ability of Canadian firms to meet third country and domestic competition. Moreover, under BFT, the adjustment to competition from the United States would take place in relatively favorable circumstances because manufacturing employment in the two countries would be stimulated as each country would be granting preferential market access to the other.

But the most important point in putting BFT adjustment in perspective is that it is likely to be much less than the adjustment Canada will have to confront if there is no BFT agreement. In that case, Canada may face a problem that is many times as severe—namely, the adjustment to increasing U.S. import restrictions. In that case, markets will be lost and none gained. Thus, the adjustment would have to occur with Canadian employment falling, rather than rising. And if increasing U.S. action against imports is met with Canadian retaliation, as in the Economic Council of Canada scenario (1986), then the adjustment that takes place would move Canada toward a more insular economy and away from the competitive challenges of the international marketplace. In these circumstances, it would be *more*, rather than less, difficult for Canada to adjust to the other competitive challenges described in Chapter 1. Therefore, a strong argument for BFT is that it would allow Canada, in a relatively favorable and unhurried way, to undertake a set of adjustments that would make it easier and less costly to adjust to the unavoidable challenges described in Chapter 1.

In the last analysis, despite the strong arguments above that BFT is superior to alternative policies and would involve less adjustment than expected, considerable uncertainty remains. In the face of this, it is not clear that a BFT agreement will be salable unless individuals can be provided some insurance against personal damage. Although BFT offers net benefits overall, and there would be many winners, there will also be some losers. The problem is that there is no sure way of identifying in advance precisely who the losers will be. If the population is sufficiently risk averse, then this may so erode the projected net benefits of BFT that this policy may be difficult to justify.

Rather than letting this problem of risk aversion weaken or even defeat the case for trade liberalization, a far better way to deal with it is to have the government provide adjustment assistance policies as insurance against risk in a situation in which private insurance is not available. With risk aversion neutralized, the benefits of BFT would no longer be compromised. In short, the justification of BFT may depend upon the development of an adequate program of adjustment assistance.

In 1985, the Macdonald Commission recommended bilateral free trade between Canada and the United States. It also recommended a $4 billion annual Transitional Adjustment Assistance Program to be financed out of reforms to unemployment insurance (UI) and to be available to the long-term unemployed and any displaced workers, whether or not they were displaced for trade-related reasons. This program included on-the-job training, relocation subsidies and early retirement benefits (Canada, Macdonald Commission, 1985, Vol. 2, pp. 616–618).

Canada and the United States have had adjustment assistance programs in place during the Kennedy and Tokyo Rounds of trade liberalization. There is a strong case for them to do so again as they move into another round of multilateral liberalization and a possible bilateral free trade agreement.

3

How Well Will the Market Work in Facilitating Adjustment?

The better the market works in facilitating adjustment, the less responsibility the government will have to exercise. How well does the market work?

An excellent, but not perfect, set of adjustment mechanisms is provided by the marketplace, where decisions are made by individuals and firms responding to changing market signals. For example, the rising wage and employment opportunities that occur in expanding high productivity sectors provide a strong incentive for labor to move into these sectors from less prosperous, low productivity sectors. This move not only benefits labor, but also society as a whole, since the nation's total output is increased as a result. Similar incentives lead to the reallocation of capital.

If the market were always to work perfectly, there would be no reason, on grounds of efficiency, for government programs of adjustment assistance. But the market often does not work perfectly. We will now describe examples of market failure that may justify government adjustment assistance programs. But a strong warning is in order: even in situations where government intervention *could* make the market work better, poorly designed government policies may make it work worse.

The Rationale for Government Adjustment Assistance Programs

While the market provides the most important set of adjustment mechanisms, a number of market deficiencies may justify government intervention. We begin with one touched on at the end of the last chapter.

(1) Private Insurance Against Unemployment Is Often Not Available

In some instances it may be possible for the labor force to buy "unemployment insurance" by accepting a smaller wage increase in order to get greater job security; an example was the last wage contract between General Motors and the United Auto Workers. Why not let all unemployment insurance be dealt with in this way? The answer is that it is not feasible for many workers; an obvious example are those who go from one seasonal job to another. Moreover, even when labor is able to "buy insurance" in the private market, the government may be able to provide insurance at a lower cost by pooling risks over a broad range of all industries. Furthermore, negotiating job security tends to lock employment in its present pattern, and thus deters adjustment. Accordingly, there is a role for the government to play in providing unemployment insurance.

(2) The Capital Market May Provide Inadequate Funds to Finance Adjustment

Consider a firm facing a major adjustment that requires new investment (perhaps to expand its machinery and equipment to sell in a larger market). Suppose further that this investment will be profitable in terms of future earnings. A firm will typically borrow to finance this investment. But in some instances this may not be possible because of inadequate collateral assets, credit rationing or other imperfections in the capital market. Moreover, even more severe problems are typically faced by labor trying to borrow to cover its adjustment costs in the form of, for example, retraining or relocation expenses. It typically cannot use the possibility of a future job as collateral, and it may have no other assets available. In such instances, a case can be made for government financial assistance to cover retraining or relocation costs. But this example also illustrates how government policies may make a problem worse. This could well be the result, for example, if the government tries to correct the market failure of inadequate collateral assets by a wholesale extension of large, unsecured loans. (We return to this problem in Chapter 5.)

(3) Externalities in the Accumulation of Human Capital

Education, retraining or any other form of human capital often generates external benefits to society, above and beyond the benefits it provides to those who accumulate it. As an extreme example, the social benefits provided by the medical education of Dr. Jonas Salk—the discoverer of a polio vaccine—went far beyond the benefits he received in income, fame, personal satisfaction, and so on. Others in society received enormous "external benefits" as well. Because individuals do not take into account these external benefits when they make decisions, they often—in the absence of government action—inadequately invest in their own human capital. Thus, there is a case for government assistance to education; and, on similar grounds, for government subsidization of retraining for the unemployed.

Hence, it is not only individuals who invest in human capital, but also the government. So too may employing firms when they subsidize apprenticeship programs. However, even this does not necessarily result in a sufficient investment in human capital because the employing firms do not own the human capital they are helping to create. Instead the workers do, and they can leave, taking the firm's investment with them.[1] This poses less of a problem if the apprenticeship training is specific to the firm providing it, so that labor has difficulty in using such training elsewhere. But in this case another problem arises. Firm-specific human capital is the least desirable form of human capital for an economy seeking to ease the future problem of adjustment; the reason is that, if workers' training is firm specific, it is more difficult for them to get a job in another firm.

To sum up, the training (or retraining) that is most likely to be provided by private firms is the firm-specific kind that is the least desirable for an economy seeking to develop a capacity to adjust. Thus, the government has a role to play in encouraging the accumulation of human capital, especially in the form least likely to be provided by private firms, namely, the human capital that is *not* firm specific and that can be applied to a wide variety of tasks.

(4) Imperfect Information

For unemployed workers, there are typically substantial "information" or "search" costs, such as the costs of accumulating information about job opportunities in other locations. If such costs were to be incurred by all the unemployed seeking jobs in other locations, this would far exceed the cost to a government agency that could accumulate such information for all comers.

Of course, certain private firms are in the business of providing information for groups. For senior executives, private head-hunting firms play this role; by reducing information costs, they increase executive mobility. While private firms also exist in the less senior echelons of the labor market, there are substantial areas in which they do not. In these circumstances, government employment agencies can reduce information costs, and thus unemployment—along with the lost output that results from it.

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[1] Why do workers not make this full investment in their human capital by taking a lower wage during their apprenticeship period? One answer is that minimum wage laws may not allow this. Another is that workers do not know whether they will be laid off from the future high income job for which they are now investing. One solution that has been suggested to this problem is to force firms to compensate workers who are laid off. This is equitable, and it is also efficient insofar as it removes a deterrent to workers investing in human capital. The problem is that the state, province or even country that introduces such a requirement may find it very difficult to attract the investment and jobs for which this training is designed.

(5) Wage and Price Rigidities

If nominal prices and wages were fully flexible in a downward direction, shifts in supply or demand would result in wage and price changes rather than involuntary unemployment. For example, a decrease in demand for a product would reduce its price, thus preventing sales from falling as far as they otherwise would, and wages would fall in this industry until everyone who wanted a job would have one.

However, wages and prices are not this flexible; price and wage rigidities mean that decreased demand leads to decreased output, which in turn leads to involuntary unemployment. The efficiency loss to society is measured in terms of the value of the output that *could* have been produced by the labor that is unemployed. The ability of the Canadian or U.S. government to increase wage flexibility is limited because of the existence of minimum wage legislation.

But even if there were sufficient wage flexibility to prevent inadequate demand from creating unemployment, would it not be better to deal with the problem by applying expansive macroeconomic policies? If the problem of inadequate demand applies across-the-board to all industries, then expansive macro policies are far more likely to succeed than if the problem arises because of a shift in demand between sectors, with demand increasing in some and decreasing in others. In the latter case, an attempt to increase aggregate demand to raise employment in the weak sectors tends to create inflationary pressure in the strong ones. Since the problem is a micro one—namely, inadequate demand in only one or a few sectors—a microeconomic solution is required. Specifically, the government should attack what is often a significant deficiency in a free market economy—the immobility of labor.

(6) Labor Immobility

Two reasons that labor is immobile have already been noted: imperfect information about job opportunities elsewhere and the failure of the capital market to provide financing for relocation. But there are other reasons as well. Government policies such as rent controls may contribute to immobility between locations, while overly severe apprenticeship requirements may contribute to immobility between occupations. In the face of either type of immobility, how does one deal with the problem of shifting patterns of demand and employment that generate excess demand for labor in some occupations and areas, while inadequate demand and unemployment develop in others? Unemployment and the lost output (i.e., the efficiency loss) that results would be greatly reduced were it possible for labor to move easily between regions and occupations. This suggests that the proper role of the government, in addition to avoiding policies that contribute to immobility, is to provide several kinds of subsidies: (1) for retraining, to increase interindustry and interoccupational mobility; (2) for relocation, to increase geographic mobility; and (3) for placement and information services, to cover the search costs that workers would otherwise have to confront in moving to a new area or a new industry.

The conclusion from this and the previous section is that the problem of unemployment in certain sectors could be solved either by labor mobility or by wage flexibility. This argument is sometimes extended to the claim that labor immobility would be no problem if wages were flexible. In this case, wages in an industry or area of unemployment would fall until all of the existing labor force could find jobs without moving; and thus, it is contended, there would be no case left for government intervention to improve labor mobility. However, this argument is incomplete. Although it may be true that wage flexibility would cure unemployment, there would still be inefficiency—a loss in potential national output—if labor is not mobile and therefore does not move from the sectors of falling demand where productivity is low to the sectors of rising demand where productivity is higher. That efficiency loss cannot be cured without the mobility of labor. In other words, the problem of labor becoming unemployed in a declining, low productivity sector can be solved in one of two ways:

- wage flexibility that allows labor to retain its job in its original low productivity sector; or
- labor mobility that allows labor to move into higher productivity sectors, thus maximizing the nation's output.

Thus, wage flexibility provides only a partial increase in efficiency because it cures just unemployment. Labor mobility is more efficient because it not only cures unemployment, but also leads to the optimal (i.e. output maximizing) allocation of labor across sectors.[2] Therefore, labor mobility is the number one priority—especially in the current world of floating currencies where a flexible exchange rate provides a form of across-the-board wage flexibility that reduces the risk of a serious increase in economywide unemployment.

Finally, we reemphasize that the arguments for labor mobility between regions also apply to labor mobility between industries or between occupations.[3]

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[2] Judgments on economic efficiency here would also have to take into account strong preferences people may hold for not moving. This is a difficult issue because the public's *ex post* judgment on moving may differ from its *ex ante* judgment. For example, some who resist a move may discover that the new location is preferred to the old. (We return to this issue later.)

[3] Details in this section—but not our overall conclusion—are affected if we define wages to include both monetary and nonmonetary rewards.

We now turn to our final rationale for government intervention.

(7) Congestion in Labor Markets

The higher the rate of unemployment in an industry or region, the greater the degree of labor market congestion. The problem is illustrated in detail in Box 3-1, but the essential idea is this: when there is little unemployment—i.e., when a labor market is not congested—then it can easily absorb another worker, whose duration of unemployment will be low. On the other hand, in a labor market congested with high unemployment, another unemployed worker will have a much more difficult time finding another job; his or her duration of unemployment will be longer. *But in addition*, the arrival of that worker in the congested labor market will also increase the duration of unemployment for those already looking for a job. This is the "external cost" of that worker's entry into this labor market—that is, the cost that *others* face because of the decision he or she has made.

In deciding whether to move out of a congested labor market into an uncongested one, the only benefit the worker takes into account is the benefit of having his or her own duration of unemployment reduced; the worker does not take into account the benefit to the others in the congested market, whose duration of unemployment is also reduced. In short, in making the decision to move, the worker has an inadequate incentive because he or she values that move at less than its value to society. Government intervention to subsidize mobility is justified because it will appropriately increase the incentive of the worker who makes the decision to move.

A similar analysis applied to congestion in interindustry or interoccupational markets can be used to justify government subsidies to encourage mobility in these dimensions as well.

Reprise: The Objectives of an Adjustment Assistance Program

There are three broad reasons for a government program of adjustment assistance.

(1) Efficiency: Assisting the Market to Adjust

We have identified seven reasons why the free market may work imperfectly in bringing about adjustment, and the government policies that may be used in each case to improve that performance. But we emphasize again: this identification of areas in which the free market is inefficient does *not necessarily* justify government intervention. The reason is that while government intervention may increase efficiency, it may also reduce it; that is, it may improve the market ad-

Box 3-1.
Labor Market Congestion

The problem is illustrated in Figure 3-1. With only 5 percent unemployment at Y, a labor market can easily absorb another worker, whose duration of unemployment will be very short and whose costs of unemployment therefore will only be C_1. On the other hand, if the labor market is already overloaded, as at X, with 15 percent unemployment, one more unemployed worker will personally face a longer duration of unemployment, so his or her costs will be C_3. Moreover, that worker's arrival in this congested labor market will now also increase the duration of unemployment for those already in that market looking for a job. In other words, his or her entry into the pool of unemployed will impose "external costs" C_2C_3 on others already unemployed. This is not taken into account by the worker in deciding whether to move out of this overloaded market at X into another, say Y, where prospects are better.

Two important conclusions follow.

(1) If an unemployed worker moves from X to Y, there is only cost C_1 that he or she faces in the tight labor market at Y into which he or she moves. On the other hand, this move saves C_2 of cost in the overloaded labor market that the worker has left at X. The *benefit to society* from this move is the elimination of congestion costs C_1C_2. (We assume that there are no moving costs. If there are, then the benefit to society and to the individual would each have to be reduced.)

(2) However, the *net benefit for the individual* who decides to move (i.e., the incentive to move) is only his or her *own* reduced cost C_1C_3. The worker will not normally take into account the further reduction in costs (C_3C_2) to other workers who remain in the overloaded market.

The fact that society values mobility more than the individuals who actually decide to move* provides some justification for government subsidies to encourage mobility.

The final observation on this diagram is that if all labor markets are equally tight as at Y, adjustment policies to assist the mobility of labor are unnecessary; and if all labor markets are equally overloaded as at X, then these adjustment policies will not work. These policies are beneficial only in the more normal circumstances in which some labor markets are substantially tighter than others.

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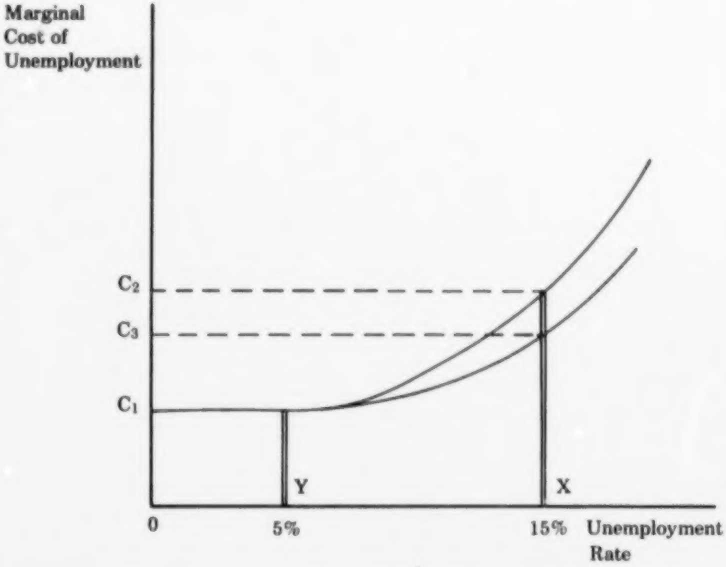
*For a complete assessment of social benefits we would also have to take into account another possibility: while increased unemployment makes it more difficult for the unemployed to find a job, it may make it easier for hiring firms to fill positions.

FIGURE 3-1. LABOR MARKET CONGESTION



justment mechanism, or it may damage it. An example might be a program offering subsidies to firms that do not need them to adjust, but instead induces them to divert resources into "rent-seeking" lobbying to acquire these subsidies.

Moreover, even if government intervention does increase efficiency, this may not be enough: it must increase efficiency by more than the cost of administering the government program.

(2) Equity

Trade liberalization, like technological change, brings long-run net benefits to society as a whole, but short-run (and in some cases, long-run) losses to some who are most directly concerned. It is only fair for society to use the benefits from liberalized trade to provide assistance to those who are adversely affected.

(3) Political Efficacy

The policy of liberalizing trade may not be politically possible unless adjustment policies are in place to provide a safety net for potential losers. This is very important because those who personally face the risk of loss (and who consequently, without appropriate assurances, may oppose the policy change) are likely to far outnumber those who would actually lose; in other words, there may be a substantial number of people who feel they run a risk of losing, but who would actually gain. If they are provided with no assurance against loss, they may oppose this policy. Thus, because of risk aversion and the absence of insurance against risk, they may defeat a policy that would have provided them with substantial benefits. By providing insurance against risk,[4] the government may be able to neutralize their opposition at very little *ex post* cost (since the government will not have to pay those who do not get hurt).

(There is an additional possible complication. There may be another group that has to be politically neutralized, namely, those who actually will benefit from BFT but who think *ex ante* that they are going to lose—and who even will erroneously think *ex post* that they have lost because they attribute the costs from other simultaneous shocks to BFT.)

In essence, the political-necessity argument is that adjustment assistance is justified not so much because it would be desirable in itself, but rather because it would be preferred to the only other options: (1) defeat of the policy of liberalizing trade; or (2) partial defeat of this policy because it becomes necessary to pay off selected, powerful opponents by providing them with protection. Such protection is much more costly than adjustment policies such as retraining and relocation subsidies. A nation's protection imposes not only a direct cost on itself, but also an indirect cost because it damages trading partners and invites retaliatory action that can be very costly to that nation. Even when protection is designed to be temporary, it often tends to become permanent, especially when it leads to an expansion of the industry and thus its voting influence; and if protection becomes permanent, it deters rather than encourages adjustment. Indeed, it can typically be viewed as an attempt by the government to relieve an industry from the pressure to adjust. (In Chapter 7 the distinction between temporary and permanent protection will be examined in more detail.)

Conflict Between Objectives

In practice it is very difficult to design a program that meets the three objectives just discussed; they are frequently in conflict, and the search in the rest of this study will be for programs that keep such conflicts at a minimum.

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[4] In an earlier section we saw that the government may wish to provide insurance against risk to make the market more efficient. Here we see that another motive may be to make bilateral free trade politically salable.

To illustrate how such a conflict may arise, suppose that, in pursuit of the objective of equity, society provides supplementary income grants to those who become unemployed. Moreover, before the net gains from BFT are left to the winners, suppose that, in the interest of fairness, all losers are fully compensated without conditions for the income loss they are suffering. While such compensation is equitable, it is inefficient insofar as it erodes incentives of the fully compensated unemployed to find another job. If income is guaranteed, why not go fishing? Obviously, many would still seek work even in these circumstances. But many would not, and this implies substantial efficiency losses in the form of lost national output and damage to the market adjustment mechanism. Thus, this policy raises a conflict between equity and efficiency: under this policy it is impossible simultaneously to achieve efficiency (maximum gains from trade liberalization) and equity (full compensation to all losers).

Concluding Observations

In this chapter we have examined the special circumstances in which the market does not work well and there is a rationale for government policies to assist in adjustment. But it should not be forgotten that in a broad range of other circumstances, the market is an effective mechanism. In designing adjustment policies, we should rely heavily upon it; market signals such as high wages and employment opportunities do draw people into new jobs. Thus, the problem is not to replace but to modify and build on the market mechanism, which despite its flaws, works relatively well.

An example of an ideal adjustment would be for the government to provide just enough income compensation, retraining, relocation, and job placement programs to neutralize the political opposition and satisfy the requirement of equity in a program that never actually has to be drawn on—or is drawn on only in trivial amounts. In this case, the adjustment takes place in a sufficiently painless and uncomplicated way to make recourse to government adjustment assistance unnecessary. At the same time, the government assistance program would make the policy politically feasible and equitable. While this set of circumstances is too much to hope for, it is interesting to note that during the 1960s and early 1970s Trade Adjustment Assistance was seldom drawn upon in the United States. Does that mean it was like the highly desirable program described above, and thus provided a near costless way of neutralizing risk-averse opponents? Or was it drawn on so little because it was "inaccessible window dressing," i.e., a program from which it was almost impossible to get money when needed, and therefore a policy that served little useful purpose? In the next chapter we will examine adjustment programs such as TAA that have been used in the past by the United States, Canada and other countries. What, if anything, can be learned from them?

4

Lessons from Past Adjustment Policies in North America and Elsewhere

Canada and the United States have employed a number of policies in the past to deal with adjustment problems. In this chapter we ask whether there have been lessons from this experience that we should bear in mind in designing adjustment policies for the future. In addition, we also consider possible lessons from the experience of other countries, which have used an even wider range of policy instruments to deal with their adjustment problems. Appendix A contains further background information on the policies used in Canada and the United States and in a few other selected countries. While, for purposes of this discussion, we have tended to separate labor market policies from those directed toward industry, it should be recognized that governments typically do not conduct these two types of policies in isolation from one another. In fact, many broad government adjustment programs embrace both.

It is important to stress that the experience with adjustment policies in one country need not be applicable in another. The differing nature of political systems, policymaking processes, economic institutions, and political attitudes may make it unrealistic to advocate that one country imitate the policies of another.

Canada

Canada has responded to adjustment pressures with a wide variety of labor market, trade and industrial policies.

General Labor Market and Training Policy

The *Canada Employment and Immigration Commission* (CEIC), through the *Canada Employment Centres* (CECs), registers the unemployed and pays *unemployment insurance*. These programs have been the main source of income maintenance and labor market information provided to the unemployed. However, as Saunders (1984) has noted, the CECs have been found to be of limited use in helping the unemployed find jobs. (Mutti, 1985, reports that a similar problem exists with Employment Service offices in the United States.)

Saunders suggests that a vicious circle may develop if employers assume that most persons searching via the CECs have poor work histories and low skill levels. This would make employers reluctant to list vacancies for good jobs because they would be faced with the costs of screening out undesirable applicants. Knowing this, highly skilled workers would be reluctant to search through CEC-listed vacancies. This unfortunate possibility has prompted recommendations that employers list vacancies, to improve knowledge of labor market conditions and encourage workers to rely more on CEC vacancy information.

There is evidence that UI reduces mobility between regions and possibly between occupations, thereby slowing the adjustment process (Cousineau, 1985, p. 193). Following the Forget Commission Report on UI, there has been a debate in Canada on whether the UI income grants are now too generous, in the sense of substantially reducing the incentive to search for work (Canada, Commission of Inquiry on Unemployment Insurance, 1986).[1]

Manpower training and retraining programs grew rapidly in the 1960s. Experience with institutional training, as opposed to on-the-job training (OJT), has been somewhat disappointing; earnings and employability following institutional training have not been improved to the extent anticipated (Davies, 1986, p. 170). The Dodge Report (Canada, Employment and Immigration Canada, 1981, p. 33) was also critical of the institutional training of the 1970s because the primary goal seemed to be temporarily reducing the rate of unemployment and providing income maintenance rather than offering training for skills in demand. This is a difficult problem for institutional training programs to avoid: training allowances (for those who have exhausted their UI payments) or extended UI made conditional on taking such training can encourage excessive participation in these programs.

Industrial on-the-job training has apparently been more effective than institutional training, in terms of raising the employment rates and wages of participants. (Saunders, 1984, and Frank, 1977, pp. 91–92, report similar findings for the United States.) This has led to increased emphasis on the subsidization of OJT, especially for higher skilled occupations in high demand.

The *National Training Program* (NTP) of 1982 increased the length of subsidized industrial OJT in some cases and attempted to improve the quality of occupational demand and supply projections. Whether this will provide much improvement remains to be seen, since the bulk of NTP funds and trainees remain in institutional training.

Programs available since 1985 under the *Canadian Jobs Strategy* seem to direct greater emphasis toward OJT. These programs also appear to allow greater flexibility for employers and trainees in choosing between on-the-job and off-site instruction.

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[1] See Courchene (1987) for a discussion of how the structure of UI payments reduces work incentives. We will consider this issue further when we make recommendations for desirable adjustment assistance policies.

Mobility Assistance

The *Canada Mobility Program* (CMP) provided assistance for relocation costs and job search until its termination at the end of 1986, when its functions were absorbed to some extent by other programs. As detailed in Appendix Table A–1, the program was relatively small and expenditures had been declining. Eligibility was restricted and, in general, mobility assistance has not been widely publicized; it is not popular with municipal or provincial governments who receive no compensation for the erosion of their tax base.

Saunders (1984) is pessimistic about the potential of such programs to significantly affect mobility because, for most individuals, the direct costs of moving may be only a small fraction of total moving costs, including psychic costs and changes in the price of housing services, and so on.[2] Another deterrent to moving is not having a job in the new location. For these reasons it is not clear how effective mobility assistance payments, at least at their present levels, are likely to be. Accordingly, some special Canadian programs directed toward areas of high unemployment or large layoffs have offered mobility assistance at three times the normal rate.

Targeted Labor Market Programs

The *Industry and Labour Adjustment Program* (ILAP) was an experimental program begun in 1981 to target assistance to workers and firms in communities experiencing significant adjustment problems. It offered enriched versions of existing programs, including increased relocation and retraining allowances, portable wage subsidies, preretirement benefits, and temporary employment-creation measures. The fact that only workers in designated industries in these localities were eligible for the benefits introduced an element of inequity into the program.

The timing of the program proved unfortunate; because of a recession, cyclical problems dominated structural problems in 1981–82 (Canada and the United States, 1984, and Robertson and Grey, 1985).

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[2] This does not mean that individuals who relocate should be compensated for losses in the value of their houses. Such a program would be beset by serious difficulties. It would be difficult to administer, expensive, and inequitable insofar as those who do not move also suffer a decline in their wealth but are not compensated. As well, programs that shoulder a part of the risk of loss from investments—in housing or anything else—encourage a misallocation of resources.

This was, in part, responsible for the sparse use of the adjustment-promoting features of the program, such as the portable wage subsidy, and the heavy expenditures on temporary employment creation.

Experience with ILAP (and its successor MILAP, the *Modified Industry and Labour Adjustment Program*) illustrates the difficulty of separating structural and cyclical (i.e., temporary layoff) problems and of directing special programs toward the former. The Trade Adjustment Assistance (TAA) program in the United States—evaluated below—also encountered this problem.

As Robertson and Grey emphasize, experience shows that a significant fraction of laid-off workers will return to their former employers. Canadian data suggest that this fraction could be even larger for import-competing industries than for others. Thus, programs designed to assist structurally displaced workers are often diverted into dealing with the cyclically displaced, where such aid is not needed. (Since these workers will be rehired by their former employers, temporary UI is required rather than retraining and relocation benefits.)

The preretirement benefits available in conjunction with ILAP and CIRP (the Canadian Industrial Renewal Program reviewed below) were generous, but because $1 of benefit was deducted for every $1 of income earned (Saunders, 1984), a 100 percent "implicit tax" rate existed at the margin that severely damaged the incentive to work. Another feature of the preretirement benefits was the sharply discontinuous nature of the eligibility criteria. While it is likely that those receiving benefits were in genuine need, others were left out entirely because they were just beyond arbitrary cutoff points. Saunders has suggested that greater equity could be achieved by smoothing off the cutoff points, that is, progressively modifying benefits as the cutoff points are approached.

The Industrial Adjustment Service

One policy initiative that has received favorable reviews and has attracted attention in the United States (e.g., Blatt, 1983; Mutti, 1985; United States, Secretary of Labor's Task Force on Economic Adjustment and Worker Dislocation, 1986) is the *Industrial Adjustment Service* (or IAS, formerly called the Manpower Consultative Service). This program provides for the establishment of a labor adjustment committee to deal with problems of adjustment and human resource planning. Of particular interest are IAS committees formed to deal with large-scale layoffs or plant closures.

A committee is established with the agreement of management and labor, who make up its membership (along with an IAS official and a neutral local chairman). Established contacts of the firm, the union and the chairman with local businesses, suppliers and customers assist in locating unlisted vacancies and placing the unemployed at little cost.

An important feature of the IAS is its ability to coordinate the delivery of enhanced placement and other adjustment services before any layoff actually takes place. Legislated advance notice requirements in most provinces assist in initiating this process. The lack of such requirements in the United States, combined with delays in putting the adjustment assistance services in place once the layoff occurs, have led to disappointing results with the TAA program. If a program such as the IAS were to be widely used in the United States, a legislated requirement of advance notice could contribute to its success. Nevertheless, IAS-type pilot projects are currently being undertaken by a number of states in the United States.

The IAS is also useful in providing information on whether a layoff is cyclical or permanent. Specifically, when a firm agrees to participate in such a scheme, it is effectively confirming that it expects the displacement to be permanent, not cyclical, since no firm would be willing to try to place its laid-off workers in other jobs if it plans to recall them when business picks up. Thus, assistance under this program is likely to go in an appropriate way to the permanently, rather than the cyclically, unemployed.

Protection and Industrial Assistance

Trade-related industrial assistance measures in Canada can be traced back to the introduction of the Auto Pact. At that time, auto parts manufacturers received loans for modernization and expansion. Although the loans were mainly used to help expand exports, it may be argued that this was not an unfair trade practice because the loans were probably made at unsubsidized rates (Frank, 1977, p. 129).

Following the Kennedy Round, the *General Adjustment Assistance Program* (GAAP) aided manufacturers producing goods for which tariffs had been reduced. To qualify, firms had to demonstrate the existence of a "viable" project for which financing would be otherwise unobtainable. (Such criteria, typical of many industrial assistance programs, clearly assume the existence of some capital market imperfections that prevent otherwise profitable investments from being undertaken.) With the introduction of the *Industrial and Regional Development Program* (IRDP), the emphasis in Canadian industrial assistance seems to have shifted away from trade-related policies per se toward regional development policies.

On occasion, Canada has employed selective and temporary protection under the safeguard provisions of GATT Article XIX for a variety of products. Such measures allow an industry threatened with serious injury from imports to obtain a breathing space in which to respond to adjustment pressures. However, in the case of textiles and clothing products, Canada utilizes a more permanent system of negotiated quota protection under the Multi-fiber Arrangement (MFA). As Hart (1985) emphasizes, it is only with textiles and clothing that protection has, at least on paper, been made conditional on the industry following certain agreed-upon adjustment policies.

This policy began in 1970 with the formation of the Textile and Clothing Board, a body responsible for both approving adjustment plans and making recommendations to the government on special import protection. The policy sought to induce adjustment and thus develop an industry competitive enough to rely on the most favored nation (MFN) tariff alone for protection.

However, continued import penetration eventually resulted in sharply increased protective measures. This shift in emphasis toward protection and away from encouraging adjustment had become clear by the end of the 1970s. Hart neatly describes the "dilemma of a protectionist import policy seeking to induce adjustment. More and more protection is needed because the *need* for adjustment seems to outpace *actual* adjustment."

The 1981 modification of the Textile and Clothing Policy announced the more modest goal of eventually reducing dependence on special protection, and provided a new body—the Canadian Industrial Renewal Board (CIRB)—to administer adjustment assistance measures to the textiles, clothing and footwear industries and to their labor forces. (Details on these measures are contained in Appendix A.) The special protection already in effect was extended. Textiles and clothing received continued quota protection under a renewed MFA (since renewed again), and a three-year global quota was imposed on imports of nonleather footwear. (All footwear quotas, with the exception of some women's and girls' leather and nonleather footwear, were removed in 1985. Remaining quotas have been progressively expanded and will be lifted altogether by the end of 1988.)

The CIRB tried to provide assistance to "viable" firms for restructuring, increasing productivity and so on. It also allocated funds to reduce the dependence of certain communities on textiles, clothing and footwear employment. There is evidence that, as intended, the program supported the stronger firms and that TCF employment in the designated communities decreased.

However, there is little evidence that the international competitive position of the industry has significantly improved. Textile producers continue to suffer from the effects of a small domestic market in which scale economies cannot be fully exploited—the traditional Canadian problem that BFT is designed to relieve. The major problem faced by the industry is how to reverse the loss of domestic market shares in many lines of production to "low cost" producers in developing countries. Attempts to "modernize" domestic plants, for example, can be imitated by off-shore producers. Thus, it is difficult to see how attempts at "modernization" or "revitalization" can succeed.

Harris, Lewis and Purvis (1984, p. 88) point out the dangers of the modernization objective. They note that "an outdated and poorly-maintained capital stock is often cited as the cause of problems experienced in traditional manufacturing sectors . . . , a conclusion that leads to the policy prescription of subsidizing new investment in such sectors." Instead, the deterioration of the capital stock may be the *result* of the sector's decline because new investment is typically not profitable in a declining industry. Subsidizing such investment could be a costly mistake.

The costs of protection of clothing production in Canada by tariffs and quotas have been estimated by Jenkins (1980) using 1979 data. He finds that protection has increased employment in clothing production, but at a cost of about $17,000 per year per job—an amount considerably higher than the roughly $10,000 average annual wage of a clothing worker at that time. This implies that this protection (especially through the use of quotas) is so costly that gains could be obtained from removing protection and paying any displaced workers their previous earnings. Further gains would come if displaced clothing workers were able to find employment elsewhere, as they have typically done in the past.

Another, though smaller, problem sector is shipbuilding, where excess capacity has become endemic. Production subsidies have been provided in the past to shipbuilders, although only modernization measures now receive subsidies. Some measures to rationalize part of the industry have recently been begun.

Trebilcock (1985) has summarized recent Canadian experience with bail outs of failing firms. While most bankruptcies are allowed to proceed unhindered, political pressures sometimes lead to costly bail outs for weak firms. We discuss the issues surrounding bail-out decisions more fully in the next chapter.

The United States

U.S. adjustment policies have encompassed labor market and training programs, assistance to both workers and firms, and various forms of protection.

Labor Market Policies

The *Employment Service* (ES) in the United States provides placement services and job search advice. As with CECs in Canada, the ES reportedly has difficulty in getting employers to list vacancies for skilled jobs (Sweet, 1985, p. 43). This limits the usefulness of the ES for more highly skilled, experienced workers.

Sweet (p. 14) cites 1980 data showing that 22 percent of the unemployed in the United States use the ES for job search; the corresponding number using the CECs in Canada was 46 percent. Another source reports that only about 5 percent of the unemployed in the United States find jobs through the ES (United States, Office of Technology Assessment, 1986, p. 29).

The *Trade Adjustment Assistance* (TAA) program has been the major labor market policy to assist trade-dislocated workers. The program and its history are described in Appendix A. It is of interest as an example of an unemployment insurance-based scheme. It has been the subject of a number of studies and much debate, with considerable difference of opinion as to its effects.

The program has received mixed reviews in terms of achieving its goals of equity, efficiency and political efficacy. On the question of political efficacy, there is at least some circumstantial evidence that the existence of TAA reduced political opposition to legislation liberalizing multilateral trade. This suggests that TAA made possible not only benefits from this liberalization, but also benefits from reducing the risk of increased protectionism (Aho and Bayard, 1980).

However, on the issue of equity, there is evidence, noted in Appendix B, that benefits under the program have proven disappointing relative to the private costs borne by dislocated workers. This, and the difficulty of obtaining assistance (due to strict eligibility requirements in the 1962–74 period, combined with lengthy administrative delays, especially in the early years of the program) have reportedly led to an increasing hostility on the part of organized labor toward the TAA program.

The average delay of 22 months between displacement and certification (followed by a further delay until payment arrived) was due, in part, to the difficulty of determining which workers were eligible. Lawrence and Litan (1986, p. 59) report that only those workers directly producing the relevant import-competing product in a firm were eligible for assistance. Other workers, perhaps doing similar work, were ineligible. Workers producing intermediate inputs for import-competing goods were also ineligible. Sweet (1985, p. 51) states that proposals have been made in Congress to amend TAA legislation to include such workers, as well as workers dislocated because of the transfer of production abroad.

A final unfortunate inequity in the TAA program was the disproportionate concentration of its benefits in the early 1980s on the unemployed from high wage industries, particularly the auto industry.

The efficiency effects of TAA have been difficult to assess. Its adjustment-promoting aspects were dissipated because most recipients of TAA benefits were cyclically unemployed workers who returned to their previous employers. Aho and Bayard (1984, Table 5.2) cite a survey of TAA beneficiaries displaced in 1976, of whom 70 percent returned to their previous employer, a higher percentage than for UI beneficiaries. As a result, other features of the program, such as counseling and placement services, training programs, and relocation grants, were used by only about 10 percent of all assisted workers (Trebilcock, 1986, p. 133). In part, this was also due to delays in the availability of these services and the failure to publicize them adequately.

There is also evidence that TAA increased the use of temporary layoffs by firms. Thus, it may have simply increased unemployment. This problem was exacerbated by the extended and higher levels of UI benefits that TAA offered; as a consequence, there was an increase in the duration of unemployment because laid-off workers were able to wait longer for recall (Aho and Bayard, 1984). This extended duration is undesirable unless one can argue that it resulted in a better subsequent match between workers and jobs. However, support for such a hypothesis is weak (Richardson, 1982).

However, in one respect TAA may have increased efficiency. Its certification of distressed industries may have warned off job seekers (Richardson, 1982). Certification may have also motivated job search by those who were not yet laid off and who found it easier to get new jobs precisely because they were still employed. Despite this, some empirical work indicates that TAA may have *increased* the labor force in the eligible distressed industries instead of reducing it (Lawrence and Litan, 1986, p. 22). This would suggest that TAA's extra unemployment benefits may have increased the labor force in these industries by more than its certification "warning signal" decreased that labor force. Thus, in terms of the efficiency goal of moving labor out of distressed industries, TAA provisions seem to have been less than successful.

While TAA has provided access to training programs to an increasing extent in recent years, a disappointing proportion of the unemployed have used this program to upgrade their training and acquire corresponding skilled jobs.[3] Lawrence and Litan suggest that workers may have participated in training programs simply to continue receiving income benefits. As noted by Aho and Bayard (1980, p. 369), TAA benefits are not available for OJT, which, according to earlier evidence we have cited, may be more effective than institutional training.

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[3] Lawrence and Litan (1986, p. 58) cite very poor results; but for a less unfavorable judgment see Bednarzik and Orr (1984, pp. 19–24).

The TAA program also provided assistance for firms as well as workers. Wolf (1982) has concluded that because it rewarded "attempted survival rather than exit," such assistance hindered the market adjustment mechanism. Lawrence and Litan (p. 52) report that loans were directed toward the weakest firms, but the aid apparently was of little help in improving their financial condition. As of March 1983, almost 60 percent of the loans made under the program were in default.

The *Job Training Partnership Act* (JTPA) Title III (the Dislocated Worker Program) has provided further funds for training displaced workers, regardless of the cause of their displacement. However, estimates indicate that JTPA and TAA assistance reaches relatively few dislocated workers—at most 8 percent in 1984, for example (United States, GAO, 1986, p. 21).

Because the only income support currently available to JTPA trainees is UI (which lasts 26 weeks in most states), the duration of training courses is limited. Lack of advance notice of layoffs can delay the commencement of training, as can the desire by some workers to search for another job before deciding whether to enter a training program.

The Administration's proposed *Worker Readjustment Program*, being considered by Congress at the time of writing, would replace TAA and the JTPA Title III. Its benefits would be directed toward *all* dislocated workers, and it would encourage advance notice of plant closings and layoffs. Moreover, its proposed retraining program appears more flexible than that offered by either TAA or the JTPA. For example, a "certificate of eligibility" would allow displaced workers who have found a new job the option of taking further training while employed. Thus, displaced workers would no longer have to make an early, and perhaps premature, decision about whether to search for a job or to undertake subsidized retraining.

The Worker Readjustment Program would also provide for further income support through UI: trainees enrolled by their tenth week of UI could receive continued assistance at this level until completion of training.

Temporary Protection

Examination of U.S. experience with temporary Section 201 safeguard protection has shown that relief is indeed granted only for temporary periods. Protection is limited by law to a maximum of five years, at which time an industry must petition again for relief, which is seldom granted.

In contrast, other relief measures—in particular, countervailing and antidumping duties—tend to be much more long term. This is by design: these measures against "unfair" trade are not intended to give temporary relief to ease the adjustment process. They are intended to last as long as foreigners maintain their "unfair practices."

Experience indicates that industries typically do not return to their former size by restructuring during the "breathing space" allowed by the Section 201 safeguard protection. Instead, these industries have become smaller, with employment falling in almost all cases. (See Hufbauer and Rosen, 1986, for detailed evidence on the U.S. experience.) This is not necessarily bad because, for some industries, adjustment requires decline. We will return to this issue later. The key issue for policymakers is the tradeoff between the additional costs of the safeguard protection and a potential decrease in adjustment costs (due to the spreading out of the total adjustment over a greater length of time).

Lawrence and Litan (1986) argue that the complexity of the adjustment process (as revealed by the varied experience of different industries) probably makes it unwise to commit an industry in advance to a specific adjustment plan before granting it protection. It is better to let firms and capital markets make decisions on their own. They cite cases in which industries have simply had to disappear, cases in which they have had to shrink into specialized niches, and other cases in which takeovers by foreign firms occurred.

As an example of such a pre-commitment to an adjustment plan, the major steel companies were required by 1984 trade legislation to reinvest substantially all of their cash flow in the steel business in return for increased protection. (A similar, though somewhat weaker, condition was applied to firms receiving assistance under the Canadian Industrial Renewal Program—75 percent of after-tax profits had to be reinvested in the industry.) Lawrence and Litan argue that such measures are likely to lead to excess capacity and declining international competitiveness. It has been rare for protection, combined with mandatory investment, to restore an industry's competitiveness.

Moreover, even temporary protection has been exceedingly costly. Hufbauer and Rosen (1986) estimate that costs to the public vary between $55,000 to $1 million annually *per job saved*, depending on the industry in question. Figures this high raise the question: would the beneficiaries of protection not prefer to exchange *all* forms of government assistance (such as protection that is saving their jobs, UI and so on) for a straight grant of only a fraction of this?

TAA was a modest step in this direction: increases in protection could be denied, while additional compensation was offered to labor. However, in most cases, TAA did not adequately compensate dislocated workers for their losses.

Longer-term Protection

Hufbauer and Rosen (1986) and Hufbauer, Berliner and Elliott (1986) have carried out calculations of the costs of longer-term protection.

For example, quota protection for U.S. dairy products has existed since 1953. (Many other countries have similar restrictions.) The efficiency cost of these measures is estimated to be $1,370 million annually. Moreover, there is a further cost to consumers, in the form of a transfer to producers, of more than three times this amount.

By far the most costly restrictions have been those on textiles and apparel. Hufbauer *et al.* estimate that the social costs of this protection have increased from $1.1 billion per annum in the initial 1957-73 period, to $4.8 billion under the 1982-86 Multi-fiber Arrangement. About 90 percent of this cost originates in the restraints on apparel (p. 149). This protection shows no sign of going away, with a new renegotiation of the MFA having recently been concluded.

Employment in the apparel industry remains at about the same level as in 1965—about 1.2 million. However, textile employment has fallen slowly but steadily as the industry has become increasingly capital intensive. There is some evidence that parts of the U.S. textile industry have been regaining their ability to compete in world markets (Trebilcock, 1986, p. 152).

European Experience

European Integration

The formation of the European Community provides yet another example of the way that favorable macroeconomic conditions can reduce adjustment costs. Large dislocations were feared, but did not materialize. Instead the unemployment rate fell and remained low (until 1974 at least). Real wages grew rapidly and no growth in regional disparities was observed. Tariffs were removed in 10 1/2 years instead of the originally agreed 12 years. As documented by Lane (1985), there was little use of the special safeguard actions that were allowed by the Treaty of Rome during the transition period.

Lane reports that the United Kingdom similarly encountered no serious adjustment problems, despite its short transition period (five years) and the fact that it entered the EC both as a low growth economy and at a time of generally slow growth elsewhere in Europe. This highlights the second major lesson of European integration: intra-industry specialization will be important as similar economies become more interdependent, and such specialization can be expected to ameliorate adjustment problems.

In a recent study of the effect of European integration, Owen (1983) emphasizes the importance of both intra-industry specialization and economies of scale. He estimates gains from European integration at between 3 and 6 percent of the GDP of the original six members. These figures are much greater than earlier estimates that did not consider economies of scale. Owen's study—like several Canadian studies of the gains from trade liberalization—emphasizes the importance of a detailed examination of the consequences of freer trade on industrial structure.

The only communitywide adjustment assistance programs within the EC have been the relatively small European Social Fund (ESF), directed toward mobility and training assistance, and measures taken by the European Coal and Steel Community (ECSC). While there is some evidence that the ESF has concentrated its resources in areas where training programs were underdeveloped, its funds supply only a marginal amount of expenditures on vocational training (Collins, 1983). In addition, each individual country has also introduced its own programs to deal with adjustment pressures (Wolf, 1979, p. 110). Because trade policy is determined, for the most part, at the EC level, individual countries cannot easily use trade barriers to protect industries facing adjustment problems. Governments have instead resorted to other measures, such as subsidies, that have led to friction between member states and between the EC and its trading partners.

The United Kingdom

British policy toward adjustment problems may be broadly described as defensive. Its aim—whether through employment subsidies, regional development policies or other measures—has generally been to slow adjustment and preserve employment, for a time at least. An example has been the use of employment subsidies to firms to avert or postpone layoffs, with no attempt made to distinguish between cyclical and structural problems (Trebilcock, 1986).

The relatively generous UI system replaces a large fraction of previous income, especially for low wage earners. In fact, some receive more in benefits than their after-tax income would be if they were still working; this clearly damages their incentive for job search. Minford *et al.* (1985) present calculations showing that replacement ratios (the fraction of previous working income replaced by unemployment payments and other benefits) are in excess of 0.8 for about 22 percent of nonretired households, while 6 percent have ratios of 1.0 or more.

Legally required redundancy payments are available to permanently laid-off employees; these payments vary with age and length of service. Daniel (1985, p. 67) reports that the net reduction of 25 percent in U.K. manufacturing employment between 1979 and 1983 was "achieved with remarkably little organized resistance or overt conflict. The distinctive system for managing redundancy that predominates in Britain has made a major contribution to the acceptability of job losses." He reports that at the peak of the manufacturing decline in 1981, about 9 percent of the workforce received redundancy payments. In addition, workers involved in large-scale redundancies have been assisted by the job search centers of the Manpower Services Commission, which are set up within the firm itself. These centers provide enhanced counseling and placement services, similar to those provided by the Canadian IAS.

Labor mobility has been curtailed by distortions in the housing market such as subsidized council housing and rent controls. People living under rent controls do not want to move because they would have to give up their artificially low rent payments. Minford *et al.* (1985, pp. 133–136) estimate the social welfare loss from this induced immobility to be just under 1 percent of GNP annually.

A prominent feature of British policy has been the large amount of aid given to ailing industries. Much of this has been received by loss-making nationalized enterprises: British Steel, British Leyland, British Shipbuilding, and the National Coal Board, for example. The British Steel Corporation alone received more than £2.5 billion in assistance between 1967 and 1982 (Trebilcock, 1986, p. 179). Trebilcock argues convincingly that nationalization has politicized decisions concerning the employment of much of the labor force. Recent actions involving the privatization of British Telecom, British Gas and a number of other state enterprises should help to alleviate this problem, but the least profitable enterprises remain publicly owned.

West Germany

High rates of economic growth and labor demand have helped ease the adjustment process in West Germany. The increasing pressures for structural adjustment beginning in the 1970s, especially in the steel industry, led to some reluctant intervention by governments. However, this intervention has been relatively successful in avoiding policies that retard required adjustments.

German labor market policies also appear to have been relatively successful in facilitating adjustment. This has been aided to some extent by the presence of foreign "guest workers," who function somewhat as a buffer for the domestic labor force. This should not be overemphasized; many guest workers have lived a long time in Germany, and it has not proven easy to repatriate them.

Labor practices in Germany seem to have allowed the risks of dismissal to be borne disproportionately by those employed in small enterprises. For example, workers in firms with fewer than 20 employees have no legislative protection against dismissal. Furthermore, government programs tend to subsidize the alternatives to dismissals in large firms (Bosch, 1985).

Some horizontal inequity results from reliance on "social plans" negotiated by unions and firms to assist redundant workers. Workers in otherwise similar situations benefit to different degrees depending upon the firm's financial condition and the bargaining strength of their works council or union.

Japan

Japanese adjustment policies are generally regarded as having been relatively successful in promoting and facilitating adjustment. This is due to several factors. The rapid rate of Japanese growth has undoubtedly been of primary importance. Japan provides a good example of how adjustment problems are ameliorated by buoyant macroeconomic conditions. In evaluating Japanese success, it should be kept in mind that we tend to develop a biased view because Japanese successes cross the Pacific, while Japanese failures do not. The North American public is well aware of the Sonys and Hondas; but it may not realize the condition, for example, of Japanese agriculture, where protection remains high and consumers pay extraordinarily high prices.

Compared to those in other countries, Japanese adjustment costs tend to be more heavily financed by private firms than by the government, for several reasons: government compensation to displaced workers has been limited by the relatively weak political influence of organized labor and the absence of a "welfare state" tradition; paternalistic attitudes on the part of large firms, as well as costly severance payments for regular employees, have led to the absorption of many adjustment costs by firms. In addition, large firms in Japan traditionally do not lay off employees in their regular labor force. Ignoring this may entail substantial costs to the firm in terms of industrial relations. In part, the cost of this policy has been covered by government subsidies to assist in the retention, retraining and relocation of workers within large enterprises.

Some observers have concluded that a portion of the costs of protecting the employment of the "regular" workforce has been shifted to less privileged workers. For example, many large firms allocate regular employees to affiliated firms or subsidiaries during recessions, but the employees of these smaller firms may then be displaced themselves (Anthony, 1985, p. 116).

Moreover, it is not necessarily the case that adjustment costs are lower in Japan than elsewhere. Shimada (1983) argues that the ability of the Japanese labor market to deal with external shocks is not as great as is often claimed. He states that while the measured unemployment rate has remained low relative to other countries, it has still gone up since the mid-1970s. The pressures on the labor market have been eased by the tendency of many women to drop out of the labor force during recessions, and by the deliberately slow employment adjustments by Japanese firms that keep measured unemployment rates low. Adjustment costs are spread more widely and are less visible in Japan because they are borne more heavily by firms (through lower profits) and workers (through lower real wages).

It may be the case that wage flexibility has been largely responsible for the low level of unemployment observed in Japan (Anthony, 1985, p. 107). For example, the biannual bonus payments received by many workers, which form a significant fraction of total remuneration, have begun to vary with business conditions since the mid-1970s. This effectively makes wages far more flexible in Japan than in most other countries.

While this adjustment process is possible in the context of Japanese institutions, it is hard to see how this experience could be easily translated into the entirely different institutional context in North America.

In declining Japanese industries, capacity reduction has frequently been arranged through mergers, cartels or government assisted programs to purchase capacity for scrapping. After the cartelization of the shipbuilding industry, for example, capacity reductions were shared among all firms. The larger firms accepted larger percentage reductions in capacity than smaller firms—except for those small firms that left the industry altogether.

As noted by Trebilcock (1986, p. 231), there may be some justification for cartel formation in the case of oligopolistic industries in which strategic behavior (i.e., waiting for competitors to reduce capacity first) may lead to a slower and less orderly downsizing of the industry than would otherwise occur. However, the costs to consumers should not be neglected: the setting of minimum prices is also a feature of some of these arrangements. Even if the cartel does not explicitly fix prices, its ability to organize output reductions tends to raise prices in the future when adjustment is essentially complete (although, to maintain its status, the cartel may argue that further adjustment is needed). In an attempt to deal with this problem, Japanese cartels are made temporary by law.

Japanese policies designed to rationalize the textile industry have been judged relatively unsuccessful (Trebilcock, 1986, and Finger, 1981). From the producers' point of view, attempts to register and control the number of machines in the industry did not succeed in limiting output because of the increasing productivity of new machines and noncompliance with regulations. Attempts to encourage rationalization (especially through vertical integration) have met with limited success. While considerable labor force reductions and an increasing concentration of capital has occurred in textile production, apparel production is still carried on by a host of small firms. Protection remains high and imposes substantial costs on consumers.

What then can we learn from Japanese experience? There are several points worth noting. Refusal to adjust and the resort to protection, as in the case of agriculture, have entailed heavy costs. However, there have been many Japanese adjustment successes. To the degree that these have been built on special Japanese institutions—such as the willingness of large firms to bear the adjustment costs of their workforces, and different labor market institutions—there may be little that can be translated into a North American context. To the degree that these successes have been the result of rapid and stable economic growth, there is a clear message for us: a first priority should be to get macroeconomic policy right.

Australia

Of particular interest to Canada is the Australian experience. Australia, a small, open economy, has pursued a policy of high tariffs that have affected its industrial structure in a predictable way; the result has been short production runs, excessive product diversification, unexploited economies of scale, and poor export performance. (See Baldwin and Gorecki, 1986, for a study of these effects in the Canadian case.)

While Australian protection has decreased in general over the past 15 years, it has increased in some industries such as automobiles, footwear and clothing. This may have been partly due to the general dissatisfaction surrounding the Structural Adjustment Assistance (SAA) program (1974-76), a trade-related scheme introduced after a sharp unilateral tariff cut in 1973.

SAA provided generous income replacement for workers, but its structure provided little incentive to find a job. The arbitrary nature of eligibility and the resulting perception of inequity (as a fortunate few obtained substantially higher benefits than the other unemployed) contributed to the program's lack of popularity. Of the small amount of assistance directed toward firms, most went to subsidizing existing production instead of providing compensation to firms closing plants or scrapping excess capacity. Consequently, little positive adjustment was encouraged.

The Australian response to adjustment pressures provides a clear lesson. If a government responds defensively with protection of indefinite duration in an attempt to maintain employment, rather than with effective policies to assist or promote adjustment, the costs of protection to the public will remain high; and, in general, there will be a disappointing record of adjustment and performance in declining industries.

Rationalization is very unlikely to occur unless protection is believed to be temporary, i.e., subject to reduction according to a believable timetable. Trebilcock (1986) cites the case of the Australian white goods industry where some trade liberalization and consequent rationalization has occurred. However, in many other industries, Australian policy has remained relatively protectionist despite some further trade liberalization. This protection has, at substantial cost, postponed further adjustment.

Final Observations

We now list some broad tentative conclusions from the material surveyed in this chapter.

- A policy of long-term protection (or subsidization) combined with attempts to "modernize" and regain competitiveness is unlikely to work.
- The costs of permanent protection are likely to rise over time.
- A more successful way to induce industrial restructuring is a policy of temporary protection with a clear timetable for phasing it out.
- Adjustment is made much easier by favorable macroeconomic conditions.
- Intra-industry adjustment is likely to be very important if trade liberalization occurs between similar economies. Experience from European integration and multilateral trade liberalization suggests that the resulting adjustment costs may be smaller than one would expect.
- In dealing with the weakest firms in a declining industry, some form of "closure compensation" is generally preferred to continued attempts to prop up these firms. Subsidization is also risky because it leaves the industry exposed to the risk of retaliation by trading partners.
- As unemployment benefits rise, so too do their efficiency costs as the incentive to find employment weakens.
- It is very difficult to distinguish between workers dislocated by trade changes and those unemployed for other reasons. Most countries do not attempt to do so, but instead rely on general programs. A similar difficulty arises in distinguishing between cyclically displaced and structurally displaced workers.
- The rapid delivery of adjustment assistance to displaced workers is important in ensuring the effectiveness of the

assistance. But this requires advance notice of large-scale layoffs.

- There is wide variation across countries in the success of retraining programs in terms of their ability to increase earnings and employability. Such programs face difficult design problems. While income support must be offered to trainees, it may induce excessive and wasteful participation in these programs if similar support is not available to nontrainees. Providing the right mix of training programs (on-the-job vs. institutional; skills training vs. remedial education) is an important objective.

5

The Design of Adjustment Assistance Policies: Should Priority Be Given to Assisting Firms or Workers?

The first three chapters addressed the question: "is a broad adjustment assistance program justified?" Our affirmative conclusion led to an examination in Chapter 4 of the possible lessons to be learned from our past experience—and that of other countries—in introducing adjustment programs. With this background, we now address the question in the next three chapters of how an adjustment assistance program should be designed.

Should priority in granting assistance be given to labor or to firms?

Issues that Arise in Assisting Labor

A strong argument can be made on grounds of both equity and political efficacy for assisting labor. It is equitable because it distributes some of the collective gains from BFT to those who are made unemployed by this policy and who bear its cost. It is politically effective because the existence of such an assistance program can weaken the opposition to BFT of a risk-averse labor force. These arguments hold whether the government assistance to labor comes in the form of income supplements above and beyond UI benefits, or in the form of subsidies to cover adjustment costs of relocation, retraining and so on.

However, in terms of efficiency, there is a big difference between these two forms of subsidy. A subsidy to cover adjustment costs is efficient because it makes the adjustment mechanism work better by removing a major deterrent to adjustment—the high cost of retraining and relocation that labor otherwise has to face. On the other hand, there is the risk that a subsidy in the form of an income supplement (added to UI) may be inefficient in the sense of damaging the adjustment mechanism by reducing the incentive to find work. The Macdonald Commission (Canada, 1985, Vol. 2, pp. 604-607) cites evidence that the Canadian unemployment rate has been adversely affected by increases in UI benefit levels. The U.S. Secretary of Labor's Task Force (1986, Appendix A, p. 25) concludes that, at the margin, income maintenance programs have had disincentive effects in foreign countries.

The higher the income supplement—that is, the closer the total subsidized income of the unemployed comes to the income they would receive if they still had a job—the greater is the risk of damaging incentives. Income supplements above current UI levels would increase this risk.

> *In terms of* equity *and* political efficacy, *income supplements or subsidized adjustment costs for labor are both desirable. However, in terms of* efficiency, *subsidization of adjustment costs is superior to income supplements. Therefore, first priority in assisting labor should be to subsidize adjustment costs such as relocation and retraining.*[1] *If additional income supplements are to be made (above UI), every attempt should be made to minimize the risk that they will damage incentives.*

Issues that Arise in Assisting Firms

For a number of reasons, the case for subsidizing firms is weaker than the case for subsidizing labor.

(1) Firms have better access to capital markets to cover their costs of adjustment. Specifically, they can often borrow to cover their costs of relocating or redeploying their assets in another activity. In contrast, workers are far less able to raise the funds to cover relocation

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1. A theoretical objection might be raised to our recommendation that, above UI, the unemployed should receive additional assistance "in kind" in the form of retraining and relocation grants. A standard argument has been that people get greater welfare if the grant they receive is in the form of cash with none of it being "in kind." The reason is that a straight cash grant allows them unrestricted choice on how it is spent. However, this argument does not hold when there are government programs that transfer some of the costs of unemployment to society from the individuals who are unemployed. When these individuals make decisions, they do not take into account the full cost of their unemployment; therefore, they may inadequately invest in retraining and other activities that increase their chance of becoming employed. A way of correcting this imbalance is to provide some of their assistance in the form of retraining grants, as recommended here.

or retraining. As already noted, unemployed workers are seldom able to borrow by pledging their human capital, no matter how attractive the future job possibility may be. In this case, government assistance to labor can be justified on the grounds that private capital markets fail more seriously in facilitating the adjustment of labor than of firms, and the priority in allocating limited government funds should be to correct this deficiency.

There are other reasons why relocation is easier for firms than for labor.

(2) Companies—especially multinational companies—generally have better information than do workers about alternative locations and activities to which to move. Moreover, firms have much better "early warning" sources of information, including their own international divisions and their contacts with financial houses that are becoming more and more internationalized. Firms also have much better information than workers on sources of international risk—such as pressures developing on exchange rates—and how to take action to cover themselves against this risk.

(3) It is easier for a firm to relocate or switch into another activity. For example, if BFT is phased in over a 5- to 10-year period, then a firm can redeploy a substantial amount of its capital just by drawing on its depreciation. Up to this point, the firm is not saddled with sunk costs (as is, for example, a worker with human capital specific to this firm). Thus the "mobile margin" for physical capital, that is, the percentage of the resource that can move geographically or otherwise at essentially no cost, is a very broad one, even in the medium term.

(4) Assistance to a firm means, in part, assistance to its shareholders, who typically have a diversified holding of investments that reduces their risk. Compare this to workers who are less able to reduce their risk because they are unable to diversify their firm-specific human capital. Thus, as already noted, they face large sunk costs if they have to shift "all their eggs into another specific basket." Even if their human capital is not firm-specific, they may face substantial costs if they lose seniority or have pensions that are not fully portable.

The problem of workers being unable to diversify against risk may to some degree have become intensified by trends toward stock ownership by employees in their own company, and the investment of employee pension plans within the same company or industry.

(5) In recording past experience in Chapter 4, we saw that another problem with subsidizing firms rather than workers is that the first firms to qualify for subsidies are likely to be the weakest in the industry. If such subsidies are made, the restructuring of the industry

may be more difficult; the government may be protecting the specific institutional shells that should be disappearing in the restructuring process. Moreover, such subsidies may well encourage other firms in the industry to press for subsidies to meet the "unfair subsidized competition" from the weak recipients of assistance.

(6) If firms come to view a government subsidy program as a way of covering the risks they take, the result will be overinvestment in high risk projects. Even though a high risk project may have an unjustifiably low expected profit—and accordingly should not be undertaken—it may well be initiated by an entrepreneur who sees that there will be big winnings if the gamble pays off; and if it does not, that government assistance may be available to limit the loss.

Upside vs. Downside Adjustment Policies: Backing Winners Rather than Losers

While a large part of the adjustment may well occur within firms, there will still be firms that expand, while others contract. An appropriate policy would back winners rather than losers; but how can this be done when there is no way of knowing in advance which firms will win and which will lose? (Auto Pact safeguards making it clear that certain firms would be winners will not be available this time.)

One suggestion is to set up a "winner-seeking" policy, such as tax benefits that would go to Canadian firms that succeed in expanding their sales above a certain rate in the U.S. market. But this would raise political and equity problems because tax reductions would be provided to those firms that are likely to be among the nation's most profitable.

Another problem is that a subsidy policy that selectively seeks out winners in a free trade area risks violating whatever export subsidy code is negotiated by the two countries. It is, of course, possible that the two countries may be able to agree that certain adjustment policies that would otherwise violate the subsidy code may nonetheless be acceptable during the adjustment period. In this case a temporary winner-seeking subsidy may be feasible.

The problem, in a nutshell, is this: it is far better to subsidize winners than losers. But since we cannot sort out in advance who the winners will be, the best approach is to design a general policy that seeks them out. However, for Canadian firms, winning is so closely related to success in the U.S. market that such a policy risks violating export subsidy restrictions. This does not mean that Canada does not ever want to back winners. But it does mean that Canada's ability to do so may be seriously constrained. Thus the major incentive for Canadian winners will have to be the attractions of the newly opened U.S. market, rather than subsidies from the Canadian government.

A policy of backing losers may be one the government prefers to avoid, but what should it do if a large loser faces bankruptcy? Should the government consider bailing out this firm?

Bail Outs[2]

This policy raises a number of difficult issues.

Special Problems in Bail Outs

(1) The first argument against a bail-out policy is that, once a firm has been bailed out, the government comes under even greater pressure to bail it out once more if it runs into trouble again. The reason is that the bankruptcy of a firm that was bailed out earlier is interpreted by the public as proof that the initial bail out was a mistake, whether or not it was. (It may well have been a mistake, but it is possible it was not; for example, the *ex ante* odds might have been strongly in favor of the bail out succeeding, but it may have failed because of unforeseeable and extremely unlucky developments.) A government may find it politically costly to have to face such an apparent mistake. (Despite this, governments sometimes do bite the bullet and refuse repeated assistance, as in the Canadian case of Maislin.)

(2) It is impossible for the government to set out clear guidelines for when it will or will not bail out a firm, The government never knows; each case involves a different "ad hoc" decision, which depends not only on the characteristics of the firm and its immediate dependents, but perhaps also on overall macroeconomic conditions. Even if the government were to know the conditions under which it would bail out a failing firm, it should not divulge them. If they are known, then a problem encountered earlier appears in even stronger form: any firm approaching these bail-out conditions will be less restrained by the threat of bankruptcy and may therefore be willing to take an inefficiently high risk with its resources. It may even take decisions that not only have a high risk but also a negative expected return. Although this is clearly inefficient from an overall economic

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[2] This section draws heavily on Trebilcock (1985); for more detail, see Trebilcock *et al.* (1985).

point of view, it may look like a good decision for the firm's managers. If the risk pays off, they benefit accordingly; if the risk does not pay off, then the government pays the tab. The firm is, in essence, allowed to gamble with the taxpayers' money in a game of "heads I win, tails the taxpayer loses."

Thus, the clear definition of bail-out conditions could itself tend to increase the number of bail-out candidates. There is enough incentive for gravely troubled firms to make desperate, high risk decisions in any case; this incentive should not be increased by a clear definition of the conditions under which the government will pick up the pieces. This incentive to make high risk decisions that often leads a troubled firm into even more difficulty is exacerbated by the problem it faces with its creditors. As its difficulties become greater and greater, it goes through a period of maximum risk when its assets are still sufficient to cover its outstanding debts, and creditors will not lose by forcing it into bankruptcy. Such a firm may be able to reduce the threat of bankruptcy by high risk decisions that get it out of this danger zone. If these decisions pay off, the firm lifts itself out of its vulnerable position. If they do not pay off, the firm's heavy losses drive its asset values so far below its indebtedness that its creditors cannot force its bankruptcy without incurring substantial balance sheet losses themselves.

The Difficult Bail-Out Decision[3]

Since there can be no *ex ante* guidelines, each bail-out decision is an *ad hoc* one. One *ad hoc* consideration is whether there would be a serious domino effect, with the collapse of the firm in question leading to the collapse of its supplying and other creditor firms.[4] No one pretends this is equitable; large firms that are more likely to knock down the dominoes—and that are also more likely to be able to exert political influence over a government facing a bail-out decision—are more likely to qualify than small firms. (This domino argument is often used for failing banks. While long-term solutions in the case of banks may include improving regulation by requiring banks, for example, to contribute to deposit insurance on their foreign as well as domestic deposits, it is difficult to apply this solution of increased regulation to nonbanking businesses, especially in view of the current trend *away* from regulation. In particular, the addition of a further regulatory burden is not what firms need as they move toward liberalized trade and increased competition.)

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[3] One way the government can reduce the bail-out decisions it has to face is to make it easier for firms to avoid bankruptcy. Trebilcock (1985, pp. 206–208) suggests several policies, such as allowing firms to trade loss carry-forwards for immediate cash, and reforming Canadian bankruptcy law along the lines of chapter 11 of the U.S. Bankruptcy Act, which provides a firm with protection against its creditors. The problem is that bankruptcy has an important role to play. Before reducing its incidence, it should be established that, from an overall social point of view, it is now too easy for creditors to force it.

[4] Another argument for bail outs is that they are less costly than the alternative—that is, unemployment, including the payment of unemployment insurance. But this argument *cannot* be used consistently to support a bail-out policy because so many firms headed for bankruptcy would qualify. The result would be a fossilized economy with no mechanism for weeding out inefficient firms.

Another *ad hoc* consideration is whether the bail out is likely to be successful. In the case of two of the most dramatic bail outs—Lockheed and Chrysler—the U.S. government was able to play an important role in making the bail outs succeed: for Lockheed the government was able to make large purchases of aircraft, and for Chrysler the government was able to negotiate voluntary export restraints by the Japanese. (Note in the latter case that there was an unrecognized cost of the bail out—the cost of protecting the U.S. auto market.)

One Form of Bail Out: The Loan Guarantee

This is a favored measure, but it involves problems.

(1) It tends to induce even more leverage in a firm that may be in trouble precisely because it already has too much.

(2) Because the firm's creditors now face reduced risk, they may no longer be cautious enough in evaluating the firm's future prospects and may consequently be willing to finance unjustified investments by the firm.

(3) The government is less accountable for a loan guarantee than, say, for a straight budget grant because a loan guarantee is an off-budget item.

(4) While it is true that a loan guarantee requires no immediate expenditure of funds from the treasury, it may require a future commitment of funds. If the recipient company does not recover, then the government must, in standing by its guarantee, pay out what may be a very large sum to creditors at a time when it can ill afford to do so. A government, operating under the shadow of a set of loan-guarantee time bombs that may or may not go off, may find it even more difficult than at present to exercise discipline and control over fiscal policy. A government has to face a lot of uncertainty in any case because of the

variability of its tax revenues and expenditures. Outstanding loan guarantees may add substantially to that uncertainty. Finally, a loan guarantee, like the increase in pension benefits that is sometimes used to end a public workers' strike (and that almost bankrupted the City of New York) can be viewed as today's politicians pushing the problem off onto a different set of politicians tomorrow.

An alternative bail-out policy is for the government to take over a failing firm, put it on its feet and resell it to private interests.

Another Bail-Out Policy: Government Takeover

There are two problems with this policy.

(1) The subsidization of the firm, while it is under government ownership, may be unexpectedly large. One reason may be that the government cannot run the firm in an economic way because its decisions are colored by political considerations. For example, how does the Canadian government close an uneconomic plant in the Maritimes? It cannot maximize its profit or minimize its loss like the management of a private firm. Consequently, under government ownership the firm may never get put on its feet; it may remain a drain on the public treasury, as in the case of a number of government-owned firms in France and the United Kingdom.

(2) After many years of subsidization, the government may encounter objection to the sale of the firm from an opposition that fails to recognize (or purposely obscures) the fact that the subsidies already paid out are a sunk cost rather than an investment; specifically, the opposition may attack the government for "selling out its investment for peanuts." Moreover, in the sale itself the government may be driven in conflicting economic and political directions. It may be under great pressure to get employment guarantees from the new purchaser; but this may then reduce the selling price. (The asset value at which a government-owned firm is sold to private interests is a critical question. Note that the government can increase this value by endowing the firm with monopoly influence or similar forms of market power. Yet it is precisely this action that reduces the competitive nature of the economy. Even as firm a believer in competition as Margaret Thatcher seems, at the time of writing, to be waiting, before selling British Airways, for a cartel-like agreement between airlines that would raise the selling price of BA.)

Conclusions

Even though there is a long list of reasons why a government should not bail out a firm, it is still an option that a government cannot reject out of hand. A government must remain committed to a policy of "no bail outs" while recognizing that under certain circumstances it may have to do just that. But it should never clarify these circumstances in advance (an easy task since it seldom knows precisely what they would be in any case). Such clarification would distort the incentives of those making decisions in troubled firms.

One way of reducing distortions in incentives would be to have a policy of making any bail out affect the major players in the same way as a bankruptcy would—that is, in any bail out, replace the management and leave the stockholders stripped. Incentives will not be distorted because, in making decisions, management and shareholders will have to face "bankruptcy risks" whether the firm actually goes bankrupt or is bailed out. For the same reasons, one could argue for also leaving creditors stripped down to the situation they would face if the firm were to go bankrupt. But this would be very difficult to do, especially if the bail out has been justified as a means of avoiding the domino or ripple effects of a bankruptcy. Those effects will not be avoided if creditors are left in a situation simulating bankruptcy.

Another means of preventing distorted incentives is for the government to ensure that any bail-out action cannot be interpreted as a precedent. Accordingly, in its justification of a bail out, the government must make it clear that the bail out was undertaken only because a whole set of specific problems was faced by the firm, by other firms dependent on it, and by the economy. This set should be so detailed that there is no possibility that any firm in the future can view itself as being in similar circumstances.

We now turn to the less dramatic topic of how the government should design adjustment assistance to firms, whether or not they are facing bankruptcy.

Should Adjustment Assistance to Firms Be Conditional?

Specifically, should adjustment assistance to firms be made conditional on their rationalizing and modernizing production in order to become more competitive?

This view has wide currency in Canada, where untapped economies of scale promise lower costs for firms that can use government funds to expand or reorganize into larger units. Why should the government not use any assistance it is going to pay out to ensure that this adjustment takes place?

While a policy of making assistance conditional on rationalizing may facilitate adjustment in some cases, in others it may not. As an example of why it may not, suppose the government is using conditional subsidies to force the expansion of the existing firms in an industry in order to achieve economies of scale at a time when market conditions require the *contraction* of the industry's total output. In this case the government would be having a perverse influence over the adjustment process. The same sort of perverse effect would occur if the government were to make subsidies conditional on firms maintaining a given level of employment; by slowing down the shift in labor, this would delay the adjustment process. These sorts of possibilities have led some observers to reject placing rationalization or employment conditions on grants to firms. Let firms, in response to the market, decide whether they should expand or contract, and how much labor they should use. The role of the government is to ensure that the other policies necessary to allow firms to rationalize are in place.

As an example of these other sorts of policies, suppose an *industry* should be contracting because of international market pressures, while some *firms* in the industry should be expanding because of untapped economies of scale. These apparently contradictory objectives may both be achieved by facilitating mergers that allow some firms to expand as the industry contracts. One way to accomplish this is to relax antitrust or competition policy to allow firms otherwise headed for bankruptcy more freedom to merge with successful firms. This approach has particular merit if the socially defined sum of assets of the near bankrupt firms exceed their breakup value, in which case bankruptcy would result in a social loss.

The most extreme degree of skepticism of a policy of making grants conditional on rationalizing is expressed by Richardson (1985, p. 177), who argues that this policy would seem most often to indenture workers and managers to an institutional shell that has already been revealed by the market to be comparatively unsuccessful. Is this too pessimistic a view? Is it not possible that a firm that is now unsuccessful may be made successful by rationalizing? In our view, either scenario is possible. If rationalization can make a firm competitive, then rationalization should be encouraged. On the other hand, if rationalization cannot make a firm competitive, then there is little point in pursuing policies that aim at the survival of firms rather than at their orderly exit.[5] The problem is that it may be exceedingly difficult *ex ante* to decide which category a firm is in.

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[5] One of the arguments for allowing even firms like this to survive is that they may be a useful institutional shell for preserving the skills and well-being of their long-time employees. While this may or may not be an argument for prolonging the life of the firm and easing the institution's last days on its deathbed, it is not a reason for requiring the firm to undertake long-term modernization.

While assistance for firms should not be rejected out of hand, our major conclusion in this chapter is:

> *first priority in any adjustment assistance program should be given to labor rather than to firms.*

6

Further Issues in Designing Adjustment Assistance for Labor

In the last chapter we saw that there are strong arguments for giving first priority to subsidizing the adjustment of labor rather than of firms. In this chapter we analyze a number of questions that arise in any adjustment assistance program for labor, and we examine in detail how one specific policy might be designed.

Should Adjustment Assistance for Labor Be Universally Available Or Targeted on Trade-Related Unemployment?

Both the United States and Canada have safety net programs such as unemployment insurance that are universally available. The question addressed here is: should adjustment assistance above and beyond this be universally available to all workers displaced for any reason? Or should it be targeted, for example, on those displaced by trade?

The Case for Universality

First, there is an equity argument: why should a trade-displaced worker be treated more generously than one displaced by domestic labor-saving technological change? Another argument is that considerable time and administrative costs (both for governments and for applicants) are involved in procedures to certify that an individual has become unemployed due to trade. In many cases, it is difficult to identify the cause of unemployment; and workers who have lost their jobs for other reasons will try to establish that trade has been the cause.

Finally, we have already argued that adjusting to BFT, or even more broadly to any trade shocks, is taking only one step toward the eventual objective of creating an economy that will adjust more easily to any shocks, whether they be foreign or domestic. Since BFT is now forcing us to address the problem of adjustment, why not develop a universally available set of adjustment policies to deal with trade *or* domestic shocks?

Such arguments appear to provide a strong case for universality of benefits; however, there are substantial arguments against this.

The Case for Targeting Assistance on Trade-Related Unemployment

The strongest argument against universality and in favor of targeting is cost. In neither country does the government have the fiscal elbowroom to afford a new layer of additional universal benefits. Since the government must be selective, it should target on trade-related unemployment where assistance is necessary to achieve liberalized trade, but not on domestic unemployment caused by, say, technological change where no similar government policy initiative is at such political risk. The principle is target efficiency (Weisbrod, 1977). Faced with limited funds, the government should put them where they will have the most effective payoff. This is an interesting extension of the principle established in Chapter 3 that the government should put its money where the market does not work well. We now see that it should also put its money where the political system may not work well.

By and large, the political system works fairly well in allowing the economy to adjust to domestic shocks such as the introduction of new technology, because decisions in this area are made by private firms, with the government not being held directly responsible. But in the case of trade liberalization, the political system works less well because the government *is* clearly responsible for trade policy and is therefore sensitive to pressure from politically powerful interest groups. It is here that a case can be made for targeted government assistance to neutralize the pressure of interest groups who might otherwise destroy the government's policy.[1]

Another reason why the political system works better in accommodating domestic shocks—such as technological advances by domestic firms—is that the producers who initially benefit tend to be domestic. On the other hand, in the case of trade-related shocks (such as those following technological advances by foreign firms), the initial producer benefits are likely to go to foreign firms, with many domestic producers actually losing. This example illustrates why the government may be more likely to be opposed by a strong special interest coalition of domestic producers if shocks are trade related, than if they are domestic. The necessity of neutralizing such a coalition is another reason for targeting assistance on trade-related cases.

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[1] If this approach is extended to "paying off" special interest groups, it raises major problems. For example, it may encourage special interest groups (even those in favor of the government's overall program of liberalizing trade) to try to organize sufficient opposition against this policy to ensure themselves a payoff, without destroying the policy itself.

(Should targeting be even narrower—on workers displaced not just by trade, but by the *liberalization* of trade?[2] This might increase target efficiency, but it would also increase the problem of distinguishing between those who would qualify and those who would not; and indeed might make it very difficult for workers to qualify at all, as the early experience of TAA suggests.)

Another argument for targeting assistance on trade-displaced workers is that international shocks deserve special treatment because they are more difficult to anticipate. Therefore, workers cannot take action to protect themselves and are consequently more deserving of government assistance. This is a variant on the argument that the more difficult it is to anticipate and insure against a disaster, the more the government should be prepared to provide assistance. Thus, the government provides UI to workers to ensure them against shocks that are difficult to anticipate and insure against; and it should provide further insurance against international shocks because these are even more difficult to anticipate and insure against.

A final argument that has been made for targeting assistance on the trade displaced is, in our judgment, particularly weak. It is the contention that pressure from foreign competition is somehow less fair than pressure from domestic competition; thus, those displaced by pressure from foreign competition are more deserving of assistance. But it is difficult to argue that foreign competition is inherently less fair. Specifically, one cannot claim that lower foreign wages or resource costs are unfair when these cost differences reflect comparative advantage from which both trading partners benefit. It should be reemphasized that trade and the gains from trade are based on differences in costs. Therefore, any definition of "unfair trade" must be limited to abuses such as foreign dumping and subsidies to exports. It must not be extended to differences in labor or other resource costs.

Another illustration of why differences in costs cannot be viewed as unfair comes from interstate trade. Differences in labor and resource costs between states within the United States do not justify the claim that interstate trade is unfair. Moreover, interstate trade is less constrained to be fair than is foreign trade because there is little or no recourse in interstate trade against dumping or "export" subsidies by another state.

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[2] In an interesting argument, Mutti (1985, p. 18) suggests that targeting should be broader. Adjustment assistance should go not only to trade-displaced workers, but also to *any* displaced workers in a sector that trades heavily—even if the damage to that sector has been caused by a domestic shock rather than trade. The reason is that even in these cases, protection is viewed (albeit often incorrectly) as a *cure* for damage, and the government can use adjustment assistance programs to prevent increased protection.

Conclusions

Universality is desirable if it can be afforded. If it cannot, then a number of justifications exist for targeting assistance on the trade displaced.

Other Possible Forms of Targeting Adjustment Assistance

Targeting Regions

In Canada, some assistance programs are targeted on specific depressed regions. For example, UI can be viewed as providing one generally available tier of assistance, to which further benefits are added for the unemployed in specified regions. Geographic targeting also occurred under the Industry and Labour Adjustment Program, which assisted labor and industry in communities particularly suffering from dislocation.

Targeting on regions, like any other form of targeting, raises the familiar equity question: how does one justify more generous adjustment assistance for the unemployed living in a depressed area than for those living in a more prosperous area? One answer is that the unemployed in a depressed area will have more difficulty in finding a new job. Other things being equal, they will face a longer period of financial and psychological strain from unemployment because they are in a congested labor market. Greater assistance is equitable in this case. Therefore, it is appropriate to target more generous adjustment assistance on distressed regions.

Targeting Industries

The Canadian Industrial Renewal Board targeted its assistance on the textiles, clothing and footwear industries. In the final years of the Carter presidency, TAA was focused to some degree on the unemployed in the auto industry. Does industry targeting make sense? It is very difficult to answer this in the affirmative unless it can be argued that the labor market for the target industry suffers from severe congestion, and that workers from this particular industry therefore face a relatively long average duration of unemployment. In this case the equity and efficiency argument for industry targeting would be similar to the one used for regional targeting in the previous section. But the problem is that this argument cannot be made twice. To illustrate: if there is already regional targeting, then one cannot also justify targeting benefits on a specific industry (say, textiles) because this industry "is often the sole big employer in a small community." If both kinds of targeting were applied, then unemployed textile workers in such a community would get two special subsidies—one because they live in a small town and the other because they work in a small-town industry. These workers are being given "small-town" assistance once too often.

While there may be special circumstances in which adjustment assistance may be targeted on a distressed industry, a worker should not be able to qualify for more generous adjustment assistance on the double grounds that he or she is in a distressed region and is also in a distressed industry.

Targeting the Elderly

A program of subsidized early retirement benefits to the unemployed over, say, age 55, would not raise the above problem of overlapping benefits, provided the recipients were clearly identified as no longer in the workforce and therefore no longer able to qualify for UI or any assistance targeted on regions or industries.

There are a number of arguments in favor of an early retirement policy. It is much more difficult for the elderly who are displaced to find alternative employment. Because of this, assistance for early retirement can be judged equitable. It also reduces labor market congestion (although this effect may be disappointing if firms leave the vacated positions unfilled). Moreover, early retirement benefits can be viewed as a response by the government to a market failure—namely, the reluctance of firms, because of pension and other considerations, to hire the elderly.

This suggests another desirable policy: further efforts by governments to augment geographical and occupational mobility by increasing the portability of pensions. Such measures should apply to the entire labor force, but it will be of particular benefit to the elderly because mobility is a greater problem for them, and their pensions tend to be larger.

To return to the question of special financial assistance for those retiring early, it should be noted that this policy has sometimes been used in the past as an alternative to policies designed to guarantee that jobs do not disappear. Of these two approaches, early retirement is preferred because, unlike policies that protect jobs, it has a built-in timetable for automatically phasing itself out; it ends when the retirees reach 65.

It should also be recognized that there may be unassisted and informal early retirement by those just under 55 who are able to add their own resources to UI and thus bridge the period until 55 when they can qualify for the formal early retirement benefits. Those in depressed communities with nontransferable skills may have an incentive to follow this route rather than face the prospect of both relocating *and* retraining. Thus, the retirement decisions of the public might devolve into a saw-toothed pattern under which the individuals facing the highest costs of remaining in the labor force (that is, the individuals who are unemployed and who face the largest geographical and occupational dislocation problems) would be the individuals who would tend to retire earliest. It is easy to demonstrate that this is a more efficient outcome than everyone retiring on the same date. The argument can be restated: since one of the benefits of early retirement is that it makes it unnecessary to incur relocation and retraining costs, it makes sense for those facing the heaviest relocation and retraining costs to retire earlier than those who do not face these costs. Such a saw-tooth scheme is too difficult for a government to administer and might well raise equity objections: why should the government subsidize the retirement of a 53-year-old in a small, depressed town, but not a 53-year-old in Toronto? However, if this sort of sawtoothed pattern develops as a result of individual decisions, it should be welcomed as an efficient private market response.

> *Because the elderly tend to be less mobile geographically and occupationally, policies that make them more mobile—such as increased portability of pensions—are desirable. However, special problems of reemployment will still face this group. For this reason, and to reduce labor market congestion, we recommend a program of subsidized benefits for those retiring early from the labor force.*

The Design of Policies Under Uncertainty

In a sense, almost all adjustment policies can be viewed as a response to uncertainty. We have already seen that subsidies of various forms to workers can be viewed as the government providing insurance in the face of uncertainty to those who are unable to insure their accumulated human capital. We now consider two examples of otherwise-desirable government programs that become complicated and compromised in an uncertain world.

The first is government certification of troubled sectors similar to the certification that took place in the United States under TAA. In a certain world, this policy would be highly beneficial because it would warn off potential entrants, caution firms considering new investment, and provide a signal to workers in that sector to seek employment elsewhere while they still have a job. Thus, in the view of Richardson (1985, p. 174): "TAA certification provided a strong diagnostic signal that the patient was sick, leaving it to the patient to take the requisite preventative medicine of responding to the market." Another reason why it is important for workers to get advance warning—in addition to making it easier for them to find other jobs—is that job search involves far less psychological and other forms of distress when it is undertaken before the individual is actually laid off. But in an uncertain world, such a policy of advance warning raises a problem. How, if at all, could an early warning system be designed to identify genuinely threatened sectors, as opposed to sectors facing less substantial, transitory distress? (Sometimes the distressed firms themselves know, but sometimes they do not. Much the same prediction problem arises in deciding whether a firm should be bailed out. For example, was Chrysler's distress permanent or transitory? That question simply could not be answered without knowledge of how well the K cars would sell. And public response to a new car cannot be predicted.)

Now consider a problem one stage further down the line after a layoff has actually occurred. If the layoff is known to be permanent, then the government should immediately provide retraining and relocation grants because these increase labor mobility. However, if the layoff turns out to be temporary—for example, if the unemployment is cyclical—then retraining and relocation grants would be counterproductive. Helping people to move would solve a problem that does not exist, and create a new one (a labor shortage in this area when firms attempt to rehire labor). This suggests that:

> *the emphasis on relocation and retraining should increase as it becomes more and more clear that the layoff is permanent.*

The importance of knowing as soon as possible whether a layoff is permanent leads us to one of the advantages of a program such as the Canadian Industrial Adjustment Service (IAS)—a program that is discussed in Chapter 4 and is recommended by this study. When management agrees to participate on a committee to find employment for laid-off workers, this implicitly provides early warning that the layoff is expected to be permanent. (Management is typically unwilling to help place workers in new jobs if it expects the layoff to be temporary and plans to recall the unemployed when business recovers.) While, in a world of uncertainty, no one typically knows whether a layoff will be temporary, management is often in the best position to judge.

A Portable Wage Subsidy as an Adjustment Policy

We end this chapter with an examination of a portable wage subsidy, a program that has been used with mixed results in the past. In formulating such a program, what should our objectives be? How will these objectives affect the design of the program? How can past problems with wage subsidies be avoided?

Our overall objective will not be to set out a fully polished proposal; indeed, we will show that problems will remain. Instead, we want to demonstrate how a program that compensates losers can be set up to encourage, rather than deter, work incentives and mobility.

Specific Objectives in Designing a Wage Subsidy

(1) For equity reasons, income should be provided to the losers.

(2) However, income should be provided in a way that does not substantially reduce their incentive to find new jobs.

(3) This policy should, if possible, lead to improvements in the functioning of the labor market. In particular, it should reduce occupational, industrial and geographic immobility.

(4) It should provide employment incentives on both sides of the market—to employers and to the labor force.

To achieve these four objectives, one suggestion is to design a wage subsidy with two tiers.

The First Tier

An unemployed person in a designated high unemployment area would qualify for a portable wage subsidy if he or she takes a job more than commuting distance away, say 60 miles, a job for which there is no qualified unemployed worker in the destination area who is registered with a Canada Employment Centre (CEC) or the Employment Service in the United States. The wage subsidy would last a specified period, say one year, and would be paid to the firm that hires the qualified worker.

Such a policy should have the following implications.

(1) It should improve the labor market in each of the two countries. The first step for, say, a welder who is laid off in a high unemployment area—for instance, Brantford, Ontario—would be to check on welding vacancies across Canada. Communication through the CEC with a potential employer may lead to a job; if so, the worker moves, with the moving costs subsidized by a relocation grant.

Note that the employing firm has an incentive to hire this individual and to hold the position for that worker because the firm will directly receive the wage subsidy paid by the government. However, in many bargains between workers and employers, some of the wage subsidy's benefit may indirectly go to the workers in the form of a higher negotiated wage. In this case, the employer and employee share the wage subsidy, and both benefit from it: the wage the employer pays is reduced after taking account of the subsidy, and the wage the employee receives is increased—with the wedge between the two being the government subsidy.

(2) If there are no jobs for welders, a scan of available job openings will indicate promising occupations for which the worker can begin retraining, subsidized by a retraining grant. It is possible that, during retraining, the worker will get another job. If not, as the worker completes retraining, he or she reenters the labor market as described in point 1 above.

(3) Because a worker must take a job beyond commuting distance to qualify, this wage subsidy can be viewed as an equitable way of recognizing that when people move, an additional set of problems is encountered, including possible capital losses on housing and displacement from locations and friends to whom long-standing attachments may exist.[3]

(4) A CEC that can operate at higher volume may be able to deliver its services at lower per unit cost. This is not the major point however. The key objective is to create a national labor market that can, by more efficiently matching people and jobs, reduce unemployment and thus income output.[4]

(5) In the example above in which the employer and employee share the benefit from the wage subsidy, there is an increased incentive on both sides of the labor market to increase employment. It is not just workers who have an incentive to find a new job; in addition, employers have an incentive to find displaced workers. (Such a "dual incentive" does not apply in the cases described below in which the employer gets the entire subsidy.) Because of the increased chances that a worker will have a job lined up before he or she moves, there will be a reduction in

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[3] It is sometimes recommended that the government subsidize the higher cost of housing in the new location (say Toronto) compared to the old (say Woodstock, Ontario). We reject such a subsidy for two reasons—in addition to its unaffordability.

(1) It would be inequitable because a worker remaining in Woodstock would retain a $100,000 housing asset, while a worker moving to Toronto, but otherwise in exactly the same circumstances, would now, after receiving the government housing grant, own an asset worth $200,000.

(2) This policy raises major problems of moral hazard, especially because the sums may be so large. Workers may move to Toronto just to get this grant, and then as soon as possible move back to Woodstock where they can continue to live in the same quality housing, but now have another $100,000 in the bank. In this case the government's policy is not encouraging mobility—it is providing very large and inequitable grants to those who abuse the program.

[4] However, as a partial offset to this favorable efficiency effect, a wage subsidy does raise an efficiency problem because it drives a wedge between the wage rate and the marginal productivity of those in the labor force receiving the subsidy. Consequently, the marginal productivity of labor will vary between workers on a subsidy and those who are not, and the nation's output can be increased by a reallocation of the labor force. This "resource misallocation" problem increases in relative importance as the economy approaches full employment, that is, as the unemployment problem becomes relatively less important.

one of the most important deterrents to labor mobility—uncertainty about job opportunities in the new location.

(6) Because the wage subsidy would lower employers' labor costs, it may provide a limited incentive for the creation of new jobs, and it may allow employers more elbowroom to provide on-the-job training.

(7) Finally, this program would avoid some of the problems of previous wage subsidies that have been criticized for their failure to substantially reduce unemployment.[5] (Employers are alleged to substitute labor with subsidies for labor without. Such substitution is difficult under the program described here because the individual with the wage subsidy can only take a job for which there is no local candidate.)

This policy—which we refer to as wage subsidy A—will not solve all problems. For example, it will not solve the problem of labor market congestion if there is high unemployment across Canada. But in that case, no labor market policy will. Another problem it will not solve arises if the employer gets the entire subsidy, as would be the case, for example, if the new job is unionized so that the wage is set in collective bargaining; in that case none of the subsidy would go to the employee. This suggests that another form of compensation should be paid directly to labor.

The Second Tier[6]

The objective here is to pay labor some compensation above and beyond UI benefits; the problem is to do this without eroding the incentive to find work. One approach would be to add wage subsidy B: pay workers who shift industries or occupations a certain percentage of the shortfall in their salary in their new job compared to their old. This could be for a two- or three-year period, but in practice it might often be less because it would automatically disappear as soon as the new wage rises to the old wage level. It would be equitable because it would only subsidize those who take a wage cut, but not those who are rehired by their old employer or get a new job at their old wage rate or better. Because this subsidy would be paid to those who shift occupations or industries, it would in part cover the income reduction that often occurs during the employee's formal or informal apprenticeship period of learning a new job. Finally, it could be viewed as a way of compensating workers for losses in human capital. This would be not only equitable, but also efficient because it would provide some insurance against these losses and would thus encourage labor to accumulate more human capital in the future.

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[5] Lack of success of the Canadian wage subsidy during the early 1980s is, to a substantial degree, to be explained by the severe recession in which firms were laying off rather than hiring labor.

[6] This follows similar recommendations made by Lawrence and Litan (1986, pp. 112–113) and by Mutti (1985, p. 39).

Both Tiers

For those who move, there is subsidy A. For those who shift industry or occupation, there is subsidy B. For those who do both, both subsidies apply. Both are efficient because, by limiting the beneficiaries to those who actually find new work, both increase the incentive to find a new job. There is evidence from a controlled experiment in Illinois that "reemployment" incentives do work.[7] In addition, the program would increase labor mobility by reducing the difficulty individuals face in switching locations, industries or occupations. By increasing mobility, this program is likely to reduce congestion in labor markets, with the improvement in efficiency that this implies (see Figure 3-1, p. 30, Chapter 3).

This wage subsidy would be equitable in the sense that it would provide income compensation (above UI) to individuals who have to bear the burden of trade liberalization. However, it does not pay all of these individuals, but only those who get new jobs. Is this equitable? One can take either side of the question. On the one hand, it can be argued that it is fair to reward those willing to put the extra effort into getting a new job. Alternatively, one can argue that it is unfair not to provide an income supplement to *all* those who have lost their jobs, including those who have not found new ones. The fact that it is not unambiguously beneficial from an equity point of view illustrates a fundamental theorem in economics: with very few exceptions, it is essentially impossible to design policies that are beneficial in all respects in terms of both efficiency and equity. These two objectives have a strong tendency to be in conflict; in this instance, it is the payment of compensation only to those who get a new job that raises the equity problem and dramatically improves efficiency by increasing incentives.

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[7] The U.S. Secretary of Labor's Task Force (1986, p. 35) reports that a 1984 Illinois experiment tested the effects of providing a cash bonus of $500 to new UI claimants who found employment (of 30 or more hours per week) before the end of the eleventh week following their initial UI claim, provided they held that employment for four months. Compared to a randomly assigned control group, those offered the cash bonus reduced their period of unemployment enough to make the incentive scheme cost effective, returning over $2 in reduced benefit payments for each dollar of bonus payments.

From the social point of view, the scheme would be even more effective, to the degree that the savings in UI benefit payments understate the value of the increased national output that resulted from the increased employment.

Problem Areas

It is not a simple scheme; there would be a basic tradeoff that applies to this sort of policy (just as to a tax change)—the more specifically one tries to deal with a problem, the more complicated the policy prescription becomes.

How complicated would this two-tiered system actually be? Consider two of the several problem areas.

(1) If benefits are available only in trade-related cases of unemployment, there is the problem noted earlier in this chapter of sorting out who qualifies and who does not, perhaps by some process like the certification of industries injured by trade. Those displaced for reasons having nothing to do with trade will have an incentive to claim that their problem is trade related.

While this problem tends to exist for any targeted adjustment assistance program, the next administrative problem we consider is specific to the scheme just described.

(2) How would one monitor the requirement that there be no other qualified person available in the location to which the worker is moving? If no other qualified person is registered with the employment service in that location, then there is no problem. But suppose someone *is* registered. Under what conditions can the employer deem that the registered local worker is not qualified in order to pass over him or her in favor of the subsidized relocating worker? (There must be some conditions, or an unhireable individual with an impossible personality could indefinitely block the inflow of his specific kind of labor into a whole region.) One solution might be to specify areas and occupations where labor is in short supply. In this case a new entrant could come in with a subsidy regardless of who may be registered in that area and occupation.

Concluding Observations on a Wage Subsidy

The better a program is designed to meet specific objectives, the more complicated it tends to become. One would therefore hope that a wage subsidy program would not be necessary, especially in view of:

(a) the increasing employment opportunities projected under BFT which should limit the dislocations that occur;

(b) the other adjustment policies that are available;

(c) the long breathing space to adjust that will be allowed as long as current trade barriers are phased out over an extended period.

Finally, it is not clear that such a program could yet be afforded; this issue would require additional study. Thus, our analysis of wage subsidies has not led to a fully tailored policy proposal. Instead, our objective has been to show how such a policy should be designed with the right set of incentives. The approach is similar to the extended study of how the right set of incentives should be incorporated into a negative income tax, an interesting and productive study even though the question of the affordability of this policy remained unresolved.

7

Temporary Protection as a Form of Adjustment Assistance

A clear distinction must be made between temporary protection, which may or may not be a useful adjustment policy, and permanent protection, which is not. The basic problem with permanent protection is that it represents an attempt by the government to solve the adjustment problem by blocking the adjustment. By attempting to insulate the economy from change, permanent protection makes it even more difficult to adjust to the next wave of shocks. (There is one very special form of permanent protection between Canada and the United States that is acceptable. This is the content requirement described in Box 7.1 that is designed to prevent the free trade area from being used to erode each country's protection against third countries. Without this requirement, a bilateral free trade agreement is simply not feasible. Recognizing this exception, we hereafter reserve the term "permanent protection" to describe all other forms of permanent protection between the two countries.)

The most important single disadvantage of temporary protection is that it may become permanent. Thus, it is essential, if protection between Canada and the United States is to be used as an adjustment assistance policy, for the government to be publicly committed in advance to a clear, unambiguous and *specific* timetable for phasing it out. Such a commitment is essential because making protection temporary is not enough. It must also be *clearly perceived* to be temporary. Otherwise it is not economic for firms to adjust; their investment decisions will be based on current tariff-ridden conditions and incentives rather than the new conditions they must eventually face.

One use of temporary protection as an adjustment policy is so well accepted that it is now commonplace: when countries form a free trade area, they do not immediately eliminate their tariffs. Instead, they retain temporary protection by phasing out their tariff cuts over a period of, say, 5 or 10 years. But while such retention of protection remains strictly temporary, it still poses problems. To use one BFT example, consider a Canadian firm that wants to quickly seize new opportunities in the U.S. market. It may find that it is not only remaining U.S. tariffs that "get in the way" of its rationalization by deterring its access to the U.S. market. Remaining Canadian tariffs may also get in its way by keeping its input costs high, as its supplying industries use their remaining tariffs to keep *their* prices up. Moreover, the phasing out of tariffs tends to delay the arrival of the economy at the new, higher income level achievable by trade liberalization. In short, delaying trade liberalization tends to make the adjustment easier, but means that it takes longer to achieve the gains from liberalized trade.

Box 7-1.
Content Requirements on Imports from Free Trade Partner

In a free trade area, each country must impose content requirements—a very special kind of permanent protection—on its imports from the other. For example, the United States might require that imports from Canada have at least 50 percent Canadian content. To see why the United States would do this, suppose it has a tariff of, say, 10 percent against imports of a good from third countries, while the Canadian tariff is 4 percent. If the United States imposes no content requirement, then a third country producer could get this good into the United States by shipping it into Canada, paying the 4 percent tariff, and then shipping it duty free into the United States. Thus, the third country producer would pay only a 4 percent tariff, rather than the higher 10 percent U.S. tariff.

Note that a slight variant of this may also be profitable. The third country producer ships the good into Canada (paying the 4 percent tariff). Then, in a "shell" company, it adds a very small amount of Canadian content. (It may be a critical component, but it is still very small.) Finally, the third country producer ships the good duty free into the United States. The total tariff paid is once again only 4 percent.

By preventing either of these trade patterns, the content requirement does two things.

(1) It prevents third country producers from doing an end-run via Canada around U.S. protection. (A similar Canadian restriction would prevent an end-run via the United States around Canadian protection.)

(2) It ensures that the very special kind of "shell company" production described here will not take place. If this good is processed in Canada for eventual shipment to the United States—and in the face of the U.S. requirement of 50 percent Canadian content it may or may not be—there will have to be a much higher level of Canadian processing. It also prevents similar shell company production in the United States for shipment to Canada.

The Case for Temporary Protection

Despite the reservations expressed above, there are several reasons why temporary protection may be a useful part of an adjustment package.

(1) Political Efficacy

It may be impossible to sell BFT if, from the date of the agreement, all protection were completely to disappear. Paradoxically, free trade may not be possible unless some protection is temporarily retained. But we repeat: it must be temporary; it must be phased out over a clearly and precisely specified timetable.

(2) Equity

Just as one accepted principle of fairness is that the many beneficiaries of BFT should provide some compensation to the losers, another reasonable principle is that it is only fair to provide those under pressure with a reasonable time period to adjust to a completely new set of circumstances.

(3) Standard Efficiency Considerations

Phased-out protection means that workers who will eventually be displaced will be able to keep their jobs longer: as long as tariff cuts are only gradually phased in, competitive pressures from imports will also only gradually increase. Thus, the job switching that takes place does not happen all at once. This means that there may be far less congestion in the labor market, thus reducing the duration of unemployment and its costs to the unemployed and to society as a whole. (From society's point of view, a reduced average duration of unemployment means less lost output.)

Delaying unemployment may not only reduce its average duration, it may also mean that some unemployment need not occur at all. One reason is that delaying layoffs may give some individuals time to get new jobs even before they are laid off. This outcome is even more likely because it is easier for people to find work when they still have a job.

So far we have concluded that retaining temporary protection may mean that the job switching that has to occur may be possible with fewer unemployed, and with the unemployed facing a shorter period of unemployment. Appendix Figure C–1, p. 126, suggests an even more dramatic possibility: delaying unemployment so it is spread over a period of 5 or 10 years may substantially reduce the amount of job switching that has to take place. The reason is this: BFT will bring specialization as export activities expand relative to import-competing activities. But if this change is spread over time in a growing economy, the *relative* increase in export specialization (i.e., *relative* decrease in import-competing activities) may be possible without any *absolute* decrease in import-competing activities. This will occur, for example, if all new capital and new entrants to the labor force are absorbed by export activities, while none are absorbed by import-competing activities. Because export activities are growing and import-competing activities are not, the economy moves, as required, to increased specialization in exports. In short, if a rapidly growing economy has an adjustment period of phased-out protection, its specialization in exports may increase as a result of expansion of export activities, without necessarily any absolute decline in import-competing activities and employment.

This is, of course, only a theoretical possibility, and depends on how long tariffs are phased out and how fast the economy is growing. While no one would predict an outcome this extreme, the analysis is interesting because it illustrates why specialization in a growing economy may involve far less job switching than is often supposed. Moreover, other reasons make the picture even more favorable. Some *decline* in import-competing activities is possible without unemployment or sunk capital losses, if this decline is limited to retirement of labor and depreciation of capital. Indeed, import-competing activities can decline even more without unemployment or sunk capital losses, if this decline is limited to the mobile margin of both labor and capital. Finally, this whole argument is based on the assumption that BFT will bring specialization between broad sectors based on comparative advantage. In the case of BFT, the evidence is that much specialization will be based on economies of scale, with Canadian specialization occurring in niches within many industries. In this case, the picture in each country is not one of an (expanding) export sector and a (relatively declining) import sector, but a number of sectors that are all growing, with considerable specialization within each (i.e., growth of some *subsectors* and decline in others). Thus, the issue of the decline of a whole large sector, or sectors—on which employment fears are based—need not arise.

For Canada, therefore, the classical problem of job switching associated with free trade specialization may be less important than typically assumed, especially if standard measures of temporary phased-out protection are used to buffer the adjustment to free trade. For the United States, the problem of job switching is even less substantial because specialization would be in response to a market increase of less than 10 percent, whereas Canadian specialization would be for a percentage market increase of many times that size.

(4) Slowing Down a "Too Rapid Adjustment"

It is often difficult to know whether a serious downturn in the output and employment in an industry is due to long-term or cyclical factors. As we saw in the last chapter, a government with perfect knowledge of the future would face no problem: if the downturn is long term, then a policy of retraining, relocation and placement assistance should immediately be brought into play. But on the other hand, if the downturn is only cyclical, then these forms of assistance are not necessary. All that is required is a policy of waiting until the unemployed are recalled.

But the problem, of course, is that we live in a world in which the future is unknown, and we therefore do not know which policy is appropriate. In these circumstances, it can be argued that some combination of the two should be used.[1] In particular, relocation, retraining and placement assistance should be made fully available, but until it becomes clearer that the problem is long term, they should not necessarily be heavily drawn upon. It can be argued that temporary protection is useful during this initial period of uncertainty because it allows the adjustment process to be delayed. If the problem turns out to be cyclical, then temporary protection will have appropriately delayed an adjustment that, it turns out, does not need to take place. On the other hand, if the problem increasingly appears to be long term, further delay becomes less and less appropriate. The "delaying policy" of temporary protection is automatically phased out according to its timetable, and retraining, relocation and other adjustment policies must be more and more heavily drawn upon.

(5) Time to "Develop" Comparative Advantage

Temporary protection allows time for reorganizing capital equipment and upgrading human capital. In the latter case, it may even allow time, through the accumulation of human capital, for the "creation of comparative advantage" in certain products that are intensive in human capital. (Just as a nation, through the accumulation of physical capital, can create a comparative advantage in activities that are intensive in physical capital, so too it may, through the accumulation of human capital, develop a comparative advantage in activities that are intensive in human capital.)[2] Part of this accumulation of capital may be in the form of computer and other high tech expertise, and developing this may take longer than the time allowed under temporary protection. But some of this accumulation of capital may be in a less exotic form, such as the development of marketing skills and facilities essential for firms that are expanding in export markets; and it may be possible to develop these more quickly.

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[1] In a mathematical model with a very special set of assumptions, Diamond (1982) illustrates how either policy is inferior to a combination of the two.

[2] For more on the creation or "engineering" of comparative advantage, see Krugman (1983b, p. 345).

How Should Tariffs Be Phased Out?

There is wide support in Canada for an idea first suggested by the Canadian-American Committee in 1965: a phaseout of U.S. tariffs over a 5-year period, while Canadian tariffs are phased out over 10 years. But in 1987 this raises a problem because the United States is less prepared today to accept conditions that are not formally symmetric. The spirit of this idea could, however, be retained in a formally symmetric framework of the following kind: each country should reduce its existing tariffs each year by 1 percentage point (or one-tenth of their present level, whichever is larger). Thus, if the United States has a 6 percent tariff on a product while the Canadian tariff is 10 percent, the U.S. tariff would disappear in 6 years while the Canadian tariff would disappear only after 10. Thus, Canada would have years 6 to 10 during which the U.S. tariff would be gone, but the Canadian industry would still have a small amount of remaining protection. Note that although this provision is formally symmetric, it provides longer temporary protection for Canada, where most tariffs are now higher. But this is not inappropriate because it is in Canada that the risks are greater.

There are a number of other variants that might increase the political efficacy of BFT. Following the U.S.-Israeli free trade precedent, some tariffs could be eliminated on a faster schedule (or, in the case of nuisance tariffs, be immediately removed) while other tariffs in more trade-sensitive industries could be eliminated on a slower schedule, with textiles, clothing and shoes being three possible candidates. Other candidates for special treatment could include: industries with firms facing major rationalization of their Canadian branch plant operations to specialize in niches of the broader North American market, such as appliances; and industries such as Canadian brewing that face a special problem of adjusting to free trade with giant U.S. competitors when they do not even have free trade within Canada at this time. (Most provinces require brewers who sell there to produce there.) One possibility for these industries would be a 5- to 7-year period of continued Canadian protection to allow the industry to prepare for free trade. This might then be followed by a period of roughly similar duration in which Canadian-U.S. trade barriers would be phased out.

Regardless of the negotiated schedule for phasing out tariffs, each country should be free to reduce any tariff faster than scheduled. This raises another interesting possibility. Instead of waiting until the end of the calendar year to make the next required tariff cut, either country could move the tariff cut forward if its currency depreciates. This would make BFT politically more acceptable because the competitive position of the domestic industry would not be weakened at the time that tariffs would actually be cut. Either country could also cut its tariffs faster during favorable periods in the business cycle.

Temporary Protection Against Import Surges Provided by the GATT

In addition to the phasing out of tariffs over time, further buffering of the adjustment process is provided by Article XIX of the GATT. This allows a country to impose a tariff on a product if increased imports "... cause or threaten serious injury to domestic producers ..." and provides for ways in which that country can then compensate its trading partners.

Would Further Temporary Protection Be Necessary?

The hope would be that the problem of import surges would be dealt with by the provisions noted above. In particular:

(1) The phasing out of tariffs would mean that the shocks from bilateral tariff cuts would not compare with the shocks from other influences—such as macroeconomic imbalances. (As we saw earlier, these shocks have been leading, via substantial exchange rate shifts, to much greater changes in comparative costs than would occur as a result of a phased-out reduction of, say, 1–2 percentage points per annum in Canadian or U.S. tariffs.)

(2) If damaging import surges do develop as a BTA is being phased in, they should be dealt with in the same way as other import surges, by using the safeguard provisions in GATT Article XIX.

While further insurance against import surges seems unnecessary, there is a substantial chance that it may be contemplated. In particular, should production safeguards of the type used in the Auto Pact be considered?[3] The question is important because the author of these safeguards leads the Canadian team in the present negotiations for a broad free trade area.

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[3] A description and analysis of these safeguards are presented in Paul Wonnacott (1987b).

While the United States would not find such safeguards acceptable in any permanent form, should Canada seek to negotiate *temporary* safeguards that would be phased out according to a specific agreed-upon timetable? The prospects here seem bleak. It is not clear that even temporary provisions of this kind could, under present conditions, any longer be negotiated even in the auto industry. The extremely favorable institutional arrangements that made the Auto Pact possible in 1965 (e.g., trade dominated by three major companies, operating on both sides of the border) no longer exist because of the growth of competition from Europe, Japan, South Korea, and so on.

If there is to be a search for further temporary protection, auto-type provisions are not the route to pursue. Instead, a simpler and more efficient mechanism might be considered.

Threshold Levels of Import Increases

In designing any supplementary policy to provide further temporary protection against import surges, a difficult question is immediately encountered. The United States will not accept any policy that protects Canada from a surge in imports from the U.S. unless that policy also protects the United States from a surge of imports from Canada. But if U.S. producers have access to such relief, how can Canadian producers achieve the high export volume to the United States that they require in order to reduce their costs to a competitive level?

One way this question could be answered would be through the following symmetric safeguard provision:

> *Provision A: If the import of a product from partner were to increase in a calendar year by more than some fixed percentage—say 10 percent—of the domestic market, the importing country can restore for the balance of that calendar year part or all of the tariff cuts it has made under the BFT agreement, up to the then prevailing MFN rate. This action should be subject to proof of injury, but this could be ex post.*

There are a number of important aspects of this suggestion.

(1) It would deal with risk in an appropriate way. Because of its relative size, Canada faces the greater risk from an import surge from the United States. (It is far easier for U.S. industry with its huge capacity to satisfy an additional 10 percent of the relatively small Canadian market than it is for Canadian industry to satisfy an additional 10 percent of the huge U.S. market.) But also because of Canada's relative size, this policy would provide it with greater insurance against risk. Thus, the insurance against risk is automatically calibrated to the

degree of risk each country would have to face. A relatively vulnerable Canada would get temporary protection from import surges from the United States, while at the same time getting relatively free access for its exports to the United States, because 10 percent of the U.S. market represents a huge increase in Canadian exports.

(2) The protection this policy provides would be strictly *temporary*. It would automatically phase itself out, with its own built-in timetable. To illustrate, suppose that, in a product that Canada has not previously exported to the United States, BFT brings a surge in Canadian shipments to the United States sufficient to trigger this provision each year. In the first year it is not triggered until Canadian shipments satisfy 10 percent of the U.S. market; in the second year, not until Canada gets 20 percent of the U.S. market; and so on, until the tenth year when Canada gets free access to 100 percent of the U.S. market. Obviously, this pattern is unlikely to continue this long; but it does illustrate that within a very few years, Canada would have *de facto* free access to the entire U.S. market. Thus, this U.S. safeguard protection against Canada would automatically phase itself out, as would any similar Canadian safeguard protection against the United States.

(3) Even though this protection, whenever it is invoked, would be strictly temporary, it would be *permanently available*. It could be invoked long after the interim adjustment period. To illustrate, suppose imports from the United States rose until they satisfied 30 percent of the Canadian market and thereafter stabilized or declined slightly for 20 years. If, in the next year, they rose by more than 10 percent of the Canadian market, this provision would be triggered.

(4) If it were to become impossible to negotiate the same import threshold levels for each country, then they might read, say, 5 percent for the United States and 10 percent for Canada. Then the American negotiator could correctly argue that this provision would protect a greater percentage of the U.S. market (initially 95 percent vs. the 90 percent of the Canadian market that would be protected).[4] At the same time, the Canadian negotiator could argue that this provision would still be more effective in providing protection to Canada because the constraint would be more likely to bind on Canadian imports from the United States than on U.S. imports from Canada. Thus, each side could correctly claim negotiating success. (Again, it is the relative size of the two markets that makes this possible.) Consequently, the agreement would become more salable on both sides of the border.

(5) Would the United States view this provision as being objectionable because it would apply only to its bilateral partner and not to

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[4] On the assumption that neither country initially imports from the other. If this is not so, the numbers would change, but not the essential idea.

all countries? In other words, would the United States object because it is "selective" protection? The answer should be no, because it is only a withdrawal of a prior bilateral tariff concession. In other words, it would only be a withdrawal of some of the selective tariff *preferences* each country would have granted the other in their bilateral negotiation of a free trade area under Article XXIV of the GATT.

For all these reasons, this policy would provide interim protection that would be far superior to auto-type production safeguards. But we emphasize again that this policy is not being recommended. The hope is that any such supplementary measure would not be necessary. Instead, adequate buffering would be provided by a phase out of tariffs (and other current protective measures), along with Article XIX relief in special cases.

So far we have considered how either Canada or the United States could use Article XIX relief against a surge in imports from the other. Of course, either country could still use this form of relief against import surges from third countries. That is, the United States could still use Article XIX action in the face of an import surge from Japan. But if the United States were to impose a nonspecific action of this kind, it would be imposed on U.S. imports from *all* countries, including Canada. This raises another Canadian fear.

Another Canadian Concern: Being Sideswiped by U.S. Article XIX Safeguard Action Directed at Third Countries

Even though Canada may not be the target of nonspecific U.S. Article XIX safeguard action, Canada could still, as the largest trading partner of the United States, be hardest hit. The same is true of nonspecific Article XIX action by Canada against a surge of imports from some third country; the United States, as Canada's largest trading partner, would likely be harder hit than the Canadian target. To address this concern, we recommend that Canada and the United States tailor their application of existing safeguard relief as follows:

> *Provision B: In GATT Article XIX action by Canada or the United States, products from the other shall be exempt as long as these products are not the principle cause of injury.*

This provision would not only allay Canadian concerns; it would go much further. If the United States were to take such action, it would *benefit* Canada. The reason is that Canadian exporters would benefit from the increased preference they would receive in the U.S. market; that is, Canadians would continue to get duty-free access to the U.S. market while competing third country producers would have to pay higher U.S. tariffs. In effect, Canadian producers would be getting "more protection in the U.S. market." For Canada, this is a far better kind of protection than, say, increasing its own trade barriers; raising its own barriers hurts Canadian consumers, but an increase in protection for Canadian goods in the U.S. market does not. (Under standard assumptions, an increase in protection for Canadian goods in the U.S. market increases Canadian welfare while an increase in Canadian trade barriers reduces Canadian welfare.)

There would, of course, be a similar benefit to the United States from Canadian application of provision B.

Would provisions A and B be fully GATT-compatible? For provision A, the answer should be yes because it would only reverse prior concessions made under the BFT agreement and therefore would not raise any tariffs above their GATT-bound MFN rates. In other words, it would not be a violation of any GATT rules; it would simply be one of the negotiated BFT rules allowed under GATT Article XXIV. Provision B is more controversial. On the one hand, it would reduce the protection that Canada or the United States could impose against the other; again, it would be one of the rules the two countries would negotiate to liberalize their trade when they form a free trade area under GATT Article XXIV. Since it would broaden the liberalization of trade between the two countries, it would be consistent with the GATT principle that the broader the coverage of a free trade area, the better. (Indeed, if a free trade area is not broad enough, the GATT will not allow it.)

It should be recognized, however, that provision B can be viewed in a less favorable light—as a violation of the application of the MFN principle to safeguards. (This paradox arises because the formation of a free trade area under Article XXIV is itself a violation of the MFN principle—an acceptable violation, but a violation nonetheless.) If provision B is interpreted in this way, it would raise a problem—in particular because, in the long-standing debate with the Europeans, the United States has contended that safeguards should be imposed on a MFN basis. Countries should not be targeted in "selective" actions. Accordingly, the U.S. reaction to provision B may be to view it as a violation of the MFN principle in the application of safeguards.

But there is good reason why the United States should view it in the more favorable light of increasing the liberalization of trade between the two countries. Specifically, a consistent U.S. position could be that safeguard tariffs should be treated just like ordinary tariffs: they should be applied on an MFN basis unless the two countries have entered (via Article XXIV) into a free trade agreement. If they have, then as the GATT requires, the more preference the two countries provide each other, the better. And the Article XIX exemption recommended here would be just such a form of preference. In short, safeguard tariffs should be treated like other tariffs: they should be im-

posed strictly on an MFN basis, except that they should be zero for any free trade partner (unless that partner is the major cause of injury). Thus, the United States or Canada could consistently oppose, say, European targeting of Japan *for* safeguard action, while at the same time favoring the exclusion of any free trade area partner *from* such action.

Other Observations

Since Canada and the United States use different accounting methods in measuring trade flows, it is possible that disputes may arise as to whether, for example, one country's imports have reached the threshold level where tariff concessions can be withdrawn. Another area of possible conflict is export subsidies. For instance, if the two countries reach a subsidy agreement, there may be conflict later over whether a newly designed subsidy violates this agreement. For these and other conflicts, it is essential to negotiate an effective dispute settlement agency.

While there may be difficulty in making all its recommendations binding, the two countries might agree to make some of its judgments binding. For example, if there were an agreement to make its judgments on accounting procedures and data conflicts binding, this alone might be of considerable importance in reducing frictions. A dispute settlement agency might also play an important fact-finding role and provide strong early warning signals of potential conflicts to the two countries.

8

Recommendations

In our rapidly changing world, adjustment cannot be avoided. We face competitive challenges domestically as well as from foreign firms. BFT—bilateral free trade between the United States and Canada—would increase the foreign challenge. But the adjustment to greater competition with a North American partner under BFT would occur in favorable circumstances, for two reasons: the preferences Canada and the United States would enjoy in each other's markets would make it easier to compete with third countries, and the adjustment would be likely to take place in a context of rising employment opportunities, particularly in Canada. Thus, the best estimate is that the adjustment to BFT would be less serious than commonly supposed. Nonetheless, it is still important to have the right set of adjustment policies in place, as "insurance" in the event that certain sectors do face substantial adjustment costs.

Our recommendations are of three types: first, general recommendations to set the stage for effective adjustment; second, proposals designed to help the economy adjust to shocks, regardless of what the source of these shocks may be; and third and most specific, recommendations aimed at dealing with trade shocks.

Policies to Set the Stage: Getting Macro Policies Right

A major reason that the European adjustment was less severe than anticipated was that the EC was formed during a period of growth; this is also one explanation of the Japanese success in adjusting. Growth means that declining sectors are under less pressure. At the same time, expanding sectors are expanding more rapidly and hence are better able to absorb unemployed labor from declining sectors. Accordingly, the first priority is to have macroeconomic policies that generate stable growth.

But this is not enough. It is also necessary, even in a high growth economy, to ensure that macroeconomic policies are not set to generate pressure on the international sectors, that is, on exporting and import-competing industries. If these sectors are depressed, then the adjustment to any further trade change, such as BFT, becomes more painful. In Chapter 1 it was argued that the large U.S. fiscal deficits in the 1980s have generated a large trade deficit and severe pressure on U.S. trade-sensitive sectors. Thus, a second strong macroeconomic recommendation is to reduce the U.S. fiscal deficit.

There is another important reason for recommending a reduction in the large fiscal deficits in both the United States and Canada. The interest payments that must be made on the government debt (that is, the interest on the accumulated past fiscal deficits) increasingly crowd out other necessary expenditures such as adjustment assistance. Even if adjustment policies are not crowded out, they may be distorted. For example, the budget squeeze in Canada and the United States makes the wrong sort of adjustment policies attractive. To illustrate, VERs are preferred to retraining programs because they do not require the government to make a cash outlay; thus, they do not add to the budget squeeze. Accordingly, the budget squeeze distorts adjustment policies toward those, such as VERs, that actually *deter* the adjustment process.

In the long term, some relief from the budget squeeze may be possible, in particular in Canada, to the degree that BFT leads to a higher level of income, and therefore greater tax receipts. But it is not clear how Canadian tax receipts will be affected by the reduction in Canadian tax *rates* that now seems almost certain in response to U.S. tax reform. (With or without BFT, Canada must keep its tax rates sufficiently competitive with the United States to prevent a bright flight and loss of investment to the south.)

Policies to Develop an Economy that Will Adjust Regardless of the Source of Shock

(1) While none of the traditional forms of adjustment assistance to firms or workers should be summarily rejected regardless of the special circumstances that may arise, first priority should be given to assisting labor. The reason is that subsidies to firms raise a number of difficult problems that subsidies to labor do not.

(2) Even though there are many reasons why the government should not bail out a firm, this option should still not be rejected out of hand. The government must remain committed to a policy of "no bail outs" while recognizing that under certain circumstances it may have to do just that. But it must never clarify these circumstances. If it did, managements of troubled firms would face incentives that would be even more distorted toward risk taking than those they already face. For the same reasons the government should ensure that any of its bail-out actions cannot be viewed as a precedent. It can do this by citing so many detailed special problems faced by the bailed out firm that no firm in the future could possibly view itself in similar circumstances.

(3) A case can be made for targeting adjustment assistance on distressed communities with heavy unemployment rates. Generally this is preferred to targeting on distressed industries. But if there is

targeting on both, then individuals should be restricted from receiving benefits from both.

(4) We have assumed that a number of basic stand-by policies will be in place. These include UI, retraining and relocation and job placement assistance. The fact that we have not discussed these in more detail does not mean that they do not need reform. Indeed, UI in Canada has now become the subject of considerable study for possible reform. Any redirection of UI should highlight its insurance role. It should not be allowed to drift toward becoming more or less permanent income assistance, since this would discourage adjustment.

(5) Another area that requires strengthening is job placement services for the unemployed. The U.S. Secretary of Labor's Task Force (1986) has recommended that some elements of the Canadian Industrial Adjustment Service be considered in the United States.

> At bottom, IAS involves the Federal government providing the expertise and financial framework to allow the firm to be more responsible for handling adjustments. It also brings the employer and the local community into the responsibility structure, which enhances the amount of resources that can be brought to bear on the problem, increases people's awareness of the problem and improves the likelihood of the acceptance of change in general. However, to be effective the program requires advance notice of plant shutdown or mass layoff (Appendix A, p. 15).

There seems to be scope for plant-specific labor-management committees of this kind and for community-based committees as well. There also seems to be more scope for the type of labor-management consultation called for by the Canadian Federation of Labour (1986, p. 17) and, in particular, for greater encouragement and incentive for labor to make suggestions on how product quality and production efficiency can be increased.

(6) There should be more concentration on on-the-job retraining, compared to institutional retraining.

(7) There should be changes in emphasis in education. From an early age, students should be taught that during their lifetime they may well have several jobs; that 1 year in, say, every 5 or 10 may be required for retraining; and that the challenge of a new job, perhaps in a new location, is one they should look forward to. At the same time, the skills they are taught should, as far as possible, be nonspecific—that is, applicable to many industries, not just one. Such basic skills range all the way from computer expertise for the gifted to ensuring that the less gifted know how to read.

(8) Since simple income supplements that continue to be received only if the individual remains unemployed (such as increases in UI) may have adverse effects on work incentives, better measures should be sought to get supplementary income into the hands of workers who

have to change jobs. Such measures might include once-and-for-all subsidies such as capitalizing UI benefits into one payment up front for those who intend to start their own business, or making severance pay tax free. (Increasing after-tax severance pay would increase the incentive in the future for labor to accumulate human capital.) With either of these policies, income is not tied to continuing unemployment; therefore there is no damage to the incentive to work. Proposals of this kind involve complications, but they are worthy of further study.

(9) The two-tiered wage subsidy set out in Chapter 6 would go beyond just avoiding damage to work incentives. It would improve these incentives because it would benefit only workers who actually acquire a new job. Because of its design, this subsidy would also reduce interregional, interindustry and interoccupational immobility, thus leading to a more efficient labor market. Although it would avoid some of the disadvantages of previous wage subsidy experiments, it could still prove costly, and it is not clear how difficult it would be to administer. Hence, it is of interest, not as a fully tailored policy recommendation, but as an illustration of how adjustment policies should be designed to incorporate favorable incentives.

(10) Increased portability of pensions would also increase mobility.

(11) Finally, in recognition of the fact that those over 55 face much greater problems of interregional or interoccupational mobility, additional assistance for their early retirement should be considered.

While these policies may be desirable in dealing with shocks of any kind, the problem of their affordability remains. Some may not be affordable in any case, and some may have to be limited to trade-related cases of injury. (In the latter area, their application would have to be justified largely in terms of political efficacy; benefits would be directed to the trade-displaced in order to sell the policy of liberalized trade.) This targeting would reduce costs, but it would also raise the difficult administrative problem of "tagging" those who qualify in a world in which there would be a strong incentive for everyone to try to participate.

Trade-Related Policies

(1) Each country would impose content requirements on imports from the other to prevent third country producers from doing an end-run around the Canadian or U.S. tariffs that they face. These would also discourage the establishment of a very special kind of shell company designed to add minimal value to certain products passing through Canada or the United States.

(2) The only kind of protection that is justified as part of an adjustment assistance program is *temporary* protection such as a phase-out of

tariffs during the initial period of adjustment to BFT. To illustrate, each country might reduce its existing tariffs each year by 1 percentage point or one-tenth of their present level, whichever is larger.

(3) Because it is likely that Canadian fears of an import surge from the United States have been exaggerated in the past, and can in any case be dealt with by the phasing out of tariffs and the use of GATT Article XIX procedures, further buffering through auto-type production safeguards is not recommended, even on a temporary basis. If any such policy is considered, it should be rejected as inferior to the following threshold mechanism: if imports of a product from the partner increase in a calendar year by more than some fixed percentage—say 10 percent—of the domestic market, the importing country can restore for the balance of that calendar year part or all of the tariff concessions it has made under the BFT agreement. This action should be subject to proof of injury, but this can be *ex post.*

(4) Finally, we suggest the following measure to prevent either Canada or the United States from being sideswiped by safeguard protection that the other may impose in response to import surges from third countries: Canada and the United States should each exempt products from the other from such action unless these products are the principle cause of injury. The underlying justification would be that safeguard tariffs should be treated like ordinary tariffs: they should be imposed strictly on a most favored nation basis, except that they should be zero for any partner in a free trade area (unless that partner is the principle cause of injury).

This study does not provide the final word; clearly some of these ideas require further study. There are, however, three strong messages.

First, the most important set of adjustment mechanisms is provided by the marketplace, where decisions are made by individuals and firms responding to changing market signals, such as changes in prices and new employment opportunities. Second, the market does not always work perfectly, and when it does not, government adjustment assistance can often be justified—even though it is likely that adjustment will be less severe and assistance programs will be drawn on less than is commonly expected. Third, in the design of adjustment policies, it is important to get the built-in incentives right to ensure that these policies encourage rather than deter adjustment. If we succeed in that, we will not only have a better set of policies to adjust to BFT, but we will also greatly improve our labor markets and our consequent ability to adjust to other international and domestic shocks.

Appendix A:

A Summary of Some Adjustment Policies and Programs in North America and Elsewhere

A broad range of policies has been carried out in many countries to influence the adjustment process—either to facilitate it or to slow or hinder it. This appendix attempts only a very selective sketch of policies in a number of countries, with emphasis on policies that have tried to deal with the dislocation caused by structural change. The use of labor market policies (both general and targeted), direct assistance to particular firms or industries, and special temporary protection or more long-term protection for adjustment purposes will be briefly outlined.

Canada

General Labor Market and Training Policies

Relevant federal government policies here encompass both general labor market policies, including training and retraining programs, and targeted, sometimes trade-related, worker adjustment policies.

Labor market information and counseling is provided at *Canada Employment Centres* (CECs). UI recipients must register at their local CEC, where staff provide counseling and administer enrollment in training programs. In 1985-86, CECs listed 1,217,600 vacancies (for jobs of more than one week's duration) and 342,700 vacancies for jobs of shorter duration. Information from the National Job Bank, a nationwide, computerized listing of job vacancies for occupations with skill shortages, is also available at CECs. About 3,500 vacancies are listed there at any given time; about 50 are added daily.

While some manpower training programs are designed primarily for individuals recently out of school, rather than for displaced workers, these programs are reviewed here because retraining is frequently advocated for the displaced.

The federal government became involved with manpower training and retraining with the *Technical and Vocational Training Act* of 1960. Enrollments and facilities expanded rapidly in the 1960s. The *Adult Occupational Training Act* established the *Canada Manpower Training Program* (CMTP) and *Canada Manpower Industrial Training Program* (CMITP) in 1967.

Institutional training (CMTP) was primarily done in provincially run colleges for a maximum of 52 weeks. The courses were free, and trainees received a living allowance. The types of training available included occupational skill training, basic academic upgrading, and the institutional portion of apprenticeship training. Under CMITP, employers were paid the direct (i.e., classroom) costs of training and a percentage of trainee wages. CMITP was targeted toward those facing the risk of displacement (due to skill obsolescence or technical change), those with "special needs" (e.g., women, natives), and those training to fill certain skills in short supply. For the latter group, the *Critical Trades Skills Training* (CTST) program began in 1979, offering extended support in recognition of longer training periods needed for higher skill occupations (Saunders, 1984).

The *National Training Act* of 1982 modified existing programs, but the division between the *National Institutional Training* (NIT) programs and the *General Industrial Training* (GIT), which included CTST, was the same as before. Occupations with national or regional shortages were specially designated, and a Skills Growth Fund created to finance expanded training facilities for them. Support for training beyond one year was made possible. A Canadian Occupational Projections System was initiated to provide better forecasts of occupational supply and demand, and thus direct resources to areas of greatest return. (Table A-2 provides further details on program expenditures and participation.)

In an attempt to improve information about local labor market conditions across the country, the Department of Employment and Immigration has begun establishing Local Advisory Councils. Business, labor and community groups are represented on these councils, whose task is to advise government officials and local CECs about areas such as skill requirements and vacancies and the local application of particular government programs (Canada, Employment and Immigration, 1986).

Mobility Assistance

A general program promoting labor mobility was the *Canada Mobility Program* (CMP), formerly called the *Canada Manpower Mobility Program* (CMMP), established in 1967 and terminated at the end of 1986. It offered assistance to the unemployed, the underemployed and those with written notice of layoff. Funds were provided to assist with the direct costs of relocation, job search in other areas and assistance for travel to temporary work.

An early feature of the CMMP, which was later discontinued, was a "homeowner's allowance." A relocating worker would receive a payment upon selling his or her home and receive a smaller amount upon buying a home in the new locality.

The level of CMP assistance varied with the distance of the move, the number of dependents and the salary of the new job. If the job to be taken was listed in the National Job Bank, assistance up to 50 percent above the basic level was possible. In the case of participants in certain targeted programs, up to three times the basic assistance was made available.

In an attempt to ensure that the local labor force was not adversely affected, CMP assistance was only available if the job to be taken was listed in the National Job Bank (or had been otherwise circulated to other CEC offices). This ensured that the number of recipients would be small. Some workers were exempt from this restriction, including those covered by certain special programs—MILAP, CIRP or certain IAS activities (all of which are explained below)—and, in some cases, those receiving social assistance or those whose UI benefits had expired. Up to half of the assistance could be made available in advance to help overcome liquidity problems. Table A-1 provides more detail about this program.

With the termination of the CMP, mobility assistance will be included as an option in elements of the Canadian Jobs Strategy (described below) and in other labor market programs.

Targeted Labor Market Programs

Some Canadian programs have been targeted toward workers in particular industries or communities. The *Transitional Assistance Benefits* (TAB) program (1965-76) was a special program offering adjustment assistance to auto workers following the Canada-U.S. Auto Pact. Supplementary UI benefits were paid, which varied with the number of dependents, but could total between 62 and 75 percent of

TABLE A-1. CANADA MANPOWER MOBILITY PROGRAM

Year	Total No. of Assistances*	Assistances for Permanent Relocation	Total Expenditure* (Mill. 1981 C$)
1975-76	47,218	12,786	22.1
1976-77	77,703	20,238	13.7
1977-78	49,938	10,206	15.2
1978-79	45,475	12,302	14.6
1979-80	36,664	6,469	11.8
1980-81	26,162	5,769	8.5
1981-82	35,658	6,849	10.8
1982-83	34,924	5,106	7.4
1983-84	40,125	8,243	8.5
1984-85	44,880	9,800	10.2
1985-86	24,175	4,910	7.2

*Excludes trainee travel grants.

Sources: Annual Reports of the Department of Manpower and Immigration and Employment and Immigration Canada.

the weekly salary. Frank (1977, p. 130) reports that the duration of benefits depended on the length of the worker's employment in the industry; if enrolled in a training program, the worker could receive benefits for up to 1 1/2 years. Only 3,100 workers received benefits; eligibility was limited and adjustment difficulties proved small.

The *Adjustment Assistance Benefits* (AAB) program (1971–82) offered preretirement benefits to older workers in the textiles and clothing sectors as part of the 1970 Textile Policy. Benefits were later extended to footwear and tanning workers in 1978.

To qualify, the Textile and Clothing Board had to determine that the layoff was the result of tariff reductions, adjustment requirements imposed by the government on the industry in exchange for special protection, or injury for which special protection would not be offered (Canada and the United States, 1984, p. 39). Dislocated workers aged 55 or older who had used up their UI benefits and had little prospect of finding further work were eligible for extended benefits comparable to UI until the age of 65. However, eligibility requirements were strict: the layoff had to be of a minimum size and duration; the worker had to have worked 10 of the last 15 years in the industry and worked a minimum of 1,000 hours in each of those years. In cases of severe hardship for workers aged 50–54, benefits were also available. Between 1970 and 1980 about 900 claims were allowed. This grew more rapidly with the recession of the early 1980s (Saunders, 1984).

The AAB became the *Labour Adjustment Benefits* (LAB) program in 1982. Its eligibility requirements were loosened. Layoffs resulting from broad industrial restructuring, as well as more specific trade-related dislocation, can be covered. It is available to all designated industries in the communities receiving ILAP aid, not just to the textiles, clothing, footwear, and tanning (TCFT) industries. Workers aged 55–65, employed 10 of the last 15 years in the industry, who have exhausted UI payments and have no employment prospects or those who have accepted employment at earnings less than previous ensurable earnings, are eligible. Benefits, subject to biannual review, are about 60 percent of average weekly insurable earnings before layoff (Canada and the United States, 1984, p. 45).

The *Industry and Labour Adjustment Program* (ILAP) began in 1981 as a three-year experimental, community-based program offering both industrial assistance and labor market programs. Its rationale was that adjustment problems posed by one or more declining industries in an area may best be addressed by directing additional resources toward them, rather than relying on universal programs. Communities were selected according to the relative size of recent, permanent layoffs, the characteristics of the workforce affected, and the nature of the regional labor market.

In addition to LAB, "enriched" versions of existing programs were offered to workers in designated industries: enhanced allowances for training for high demand occupations; mobility allowances for search and relocation at three times the normal rate; portable wage subsidies for workers over 45 years of age (good up to one year, for a maximum of $2/hr.); support to employers for direct training costs and a large fraction of trainee wages under the Critical Trade Skills Training program, described earlier; and finally, temporary employment under the Community Employment Program for those exhausting their UI benefits.

Benefits similar to those in ILAP, including access to LAB, were available to displaced TCFT workers for the duration of the CIRP, whose activities are described below. In 1985–86, 12,400 workers received about $6m in assistance. (This does not include LAB expenditures; these totaled $50m over this period.) The CIRP, which expired in March 1986, spent $57.5m in labor-related programs and benefits over its five-year life. LAB expenditures over this period totaled about $121m.

TABLE A-2. SELECTED CANADIAN PROGRAM EXPENDITURES, 1984–85

Program	Expenditure (Mill. C$)	No. of Recipients/ Participants
Training		
Institutional training		216,816
Purchase of courses	511.8	
Training allowances	117.8	
UI to trainees	217.5	
GIT	85.2	30,715
CTST	71.1	11,891
Skills Growth Fund	86.4	N/A
Total training	1,089.8	259,422
Other Programs		
CIRP	15.3	17,000
Work Sharing	32.0	54,191
MILAP	3.5[a]	2,000
CMP	12.4	52,277[b]
IAS	5.7	N/A[c]
UI[d]	10,118.0	3,181,000
Direct Job Creation	1,325.1	302,000

a. For nine months ending March 31, 1985.

b. Total number of assistances (see Table A-1).

c. 517 agreements concluded.

d. 1985 data.

Sources: Employment and Immigration Canada, Annual Reports 1984–85 and 1985–86.

The *Modified Industry and Labour Adjustment Program* (MILAP) (1984–86) succeeded ILAP and retained most of its labor market programs. The use of portable wage subsidies was discontinued. Its programs were administered by Community Adjustment Committees in each area. Of 16,000 eligible laid-off workers, 2,000 in the 10 designated areas had participated at a cost of $2.5m in the first nine months of the program.

The *Canadian Rural Transition Program* (1986–) is directed toward farm households that are not receiving UI benefits, yet are seeking other employment because of the failure of their farming business. Assistance may consist of at least one "transition grant" of $1,600 to cover living costs while seeking employment. Training, travel and relocation assistance may also be provided. A self-employment grant of up to $180/week, for up to 26 weeks, may be given to those wishing to start a new, nonfarm business. A portable wage subsidy of $3.50/hour is available for up to 40 hours per week for up to 26 weeks.

Canadian Jobs Strategy

Community Futures, a recently introduced program, is aimed at communities outside metropolitan areas affected by major layoffs and plant closures, as well as those with longer-term problems of chronic unemployment and economic decline. It seeks to reduce unemployment through measures that can include (a) creation of permanent jobs (in part through the diversification of the economic base of the community), (b) supporting existing employment, (c) providing training, and (d) providing relocation assistance. An innovative feature of the program is a "self-employment" incentive. A person receiving UI or social assistance may exchange it for a grant of $180 per week for one year while establishing or operating a business.

The program will be administered through Local Advisory Councils or Community Futures committees who will recommend which of the program's options would be most useful in their particular locality. These options are available to selected communities for up to five years.

Community Futures is one part of a general reorganization of labor market programs begun in 1985 under the title *Canadian Jobs Strategy*. Among its components are:

- *Job Development*. This supports work experience and/or skill acquisition through wage subsidies for hiring and training, with additional funds to cover training costs. Placement is a CEC responsibility; only those unemployed 24 of the previous 30 weeks are eligible. Up to one year of support is available for on-the-job training or off-site training. In 1985–86, 96,000 participated at a cost of $237m.

- *Skills Investment.* This program provides training in new skills to avert possible displacement. It offers subsidies and direct training costs to small businesses for OJT or off-site training; wage subsidies for employees on full- or part-time educational leave; government contributions toward Training Trust Funds set up with employer and employee contributions to finance future training. In 1985–86, 4,500 participated at a cost of $7.3m.
- *Skills Shortages.* Assistance for training employees in skills with "existing or anticipated shortages" is offered. Occupations may be so designated on either a local, regional or national level. Subsidized wages and direct training costs for either OJT or classroom instruction are provided for up to three years. (This is considerably longer than training that previously received support.) In 1985–86, 14,500 participated at a cost of $59.7m.
- *Innovations.* This program offers funding for "innovative solutions to labor market problems" carried out as pilot projects. Because of the public good aspect of this sort of experimentation (i.e., innovators are unable to capture fully the returns from their investment), underinvestment might result in the absence of subsidies (Gunderson, 1986, p. 127). In 1985–86, $2.1m was spent on such projects.

The Industrial Adjustment Service

A highly focused attempt to deal with displacement at the firm level is the *Industrial Adjustment Service* (IAS), originally called the *Manpower Consultative Service* (1963–). It seeks to enlist the cooperation of labor and management in dealing with diverse problems of labor adjustment and planning for changes in labor requirements. An adjustment committee (which includes labor and management representatives, a community representative and an IAS official) is formed. The adjustment problems it addresses may include large-scale layoffs, transfers of workers, plant expansion, plant shutdown, high labor turnover, low productivity, and technological change. The IAS pays up to half the costs of the committee's work and all the costs in cases of firm bankruptcy. These committees assist workers in on-the-job search before and after the layoff and coordinate delivery of adjustment services such as mobility assistance.

In 1984–85, 517 adjustment committees were formed at a cost of $5.7m. The cost of the program has been very low: roughly $200 per worker. There is some evidence that the duration of unemployment has been shortened for the average participating worker (United States, Secretary of Labor's Task Force, 1986, Appendix A, p. 39). There is also some evidence to suggest that IAS work improves labor-management relations, thus reducing resistance to adjustment.

At the provincial level, IAS also administers the *Work Sharing Program*, begun in 1982 (Reid, 1986, pp. 151–154). Under this scheme, workers receive pay for days worked and UI for days not worked. Eligibility for UI is not affected should the worker be laid off once the program (which has a 38-week maximum duration) ends.

Industrial Assistance

Canada has a variety of industrial adjustment policies, most of which now operate without reference to the source of the adjustment problem. An early exception involved the activities of the Adjustment Assistance Board, established after the conclusion of the Canadian-American Automotive Products Trade Agreement (or Auto Pact) of 1965. The board authorized loans to auto parts manufacturers for modernization and expansion totaling $94m by 1971.

The *General Adjustment Assistance Program* (GAAP) (1968–77) directed aid toward firms manufacturing goods for which tariffs were lowered in the Kennedy Round. To qualify, firms had to demonstrate injury from import competition *or* the existence of important new export possibilities. The firms also had to have viable projects for which financing would be otherwise unobtainable.

Loan insurance and guarantees (up to 90 percent of the value of the loan) were most commonly given. Grants of up to half of consulting costs for restructuring plans and direct loans (in special cases) for restructuring could also be provided (Canada, DRIE, 1985a, p. 235).

Frank (1977, p. 130) reports that even in its first years almost all program activity consisted of loan insurance for export activities. (Between 1968 and 1971, $38m in loan insurance was authorized.) Subsequent changes to the GAAP allowed virtually any firm involved in import-competing or export activities to be eligible for assistance.

The GAAP was absorbed in the *Enterprise Development Program* (EDP) (1977–83). The EDP was directed toward secondary manufacturing affected by trade liberalization, electronics projects and the footwear and tanning industries. Selected firms were assisted in developing new or improved products or processes with a view to making the firms "more viable." Assistance took the form of "last resort" loan insurance, contributions to consulting costs and special loans to encourage restructuring in the footwear and tanning industries.

The *Industrial and Regional Development Program* (IRDP) (1983–) absorbed the EDP and five other programs. It provides manufacturers and processors with investment incentives based on measures of regional economic disparity. While projects must be commercially viable, assistance is granted only to projects that it is believed would not otherwise be carried out. Grants, loans and loan guarantees are the principal instruments and are provided for project planning, marketing, plant establishment, modernization, or expansion (Canada, DRIE, 1985a, p. 230). For large loans or loan guarantees, or in situations where more than 100 jobs may be directly affected, the Department of Regional Industrial Expansion (DRIE) may consult with the Canada Employment and Immigration Commission. The firm involved could be required to submit an acceptable "human resource plan" for the project as a condition for government assistance. In 1984–85, $418.1 million was spent under the IRDP (Canada, DRIE, 1985b).

Industry-Specific Assistance

A number of industry-specific programs have been utilized: the *Shipbuilding Industry Assistance Program* directly subsidized domestic shipbuilding, but now subsidizes only modernization activities; the *Pulp and Paper Modernization* program (1980–85) provided grants to stimulate investment for a variety of purposes. Of particular interest are the programs for the TCFT industries. Here policies to encourage restructuring were combined with special import protection.

The *Footwear and Tanning Industries Adjustment Program* began in 1974. Firms in the industry, then protected by tariffs and global quotas, were offered grants for consulting costs, and loans for mergers and capital purchases. In 1981, a three-year quota was announced under safeguard provisions and further financial assistance ($17m) was made available under the Canadian Industrial Renewal Board (Canada, DRIE, 1985a, p. 237).

The CIRB (1981–86) administered the *Canadian Industrial Renewal Program* (CIRP). This consisted of special programs for the textiles, clothing, footwear, and tanning industries. The four-year budget of $364.7m was divided between the *Sector Firms Program* (SFP) ($239.5m) and the *Business and Industrial Development Program* (BIDP) ($110.2m).

The SFP assisted strong firms in designated geographic areas to restructure, modernize and improve product quality, design and marketing. These areas were chosen for their degree of dependence on the TCFT industries. The program sought to reduce this dependence, reduce TCFT employment, and eventually to lessen reliance on trade restrictions. The BIDP sought to broaden the economic base of the selected regions by assisting the location or expansion of non-TCFT industries.

The industrial assistance part of ILAP offered grants and interest-free loans to manufacturing or processing firms in the designated regions to establish, expand or restructure operations (Canada and the United States, 1984, p. 49); $10.6m was spent on 23 projects.

Government bail outs of failing firms also have adjustment implications. Recent Canadian experience is reviewed by Trebilcock (1985). In terms of the total number of bankruptcies, the number of bail outs is not large, but some prove very costly. Policy tends to be *ad hoc*, and a detailed enumeration of particular cases would be out of place here. See Chapter 5 for a discussion of the nature of bail-out decisions in some depth.

Special Trade Protection

Canada has undertaken a number of safeguard actions under the authority of GATT Article XIX. This allows for the imposition of temporary protection in cases in which it is determined that imports are causing or threatening serious injury to domestic industry. Tariffs or (more often) quantitative restrictions have been imposed at one time or another on a wide range of products. In general, Canada has made fairly frequent use of safeguards, 22 cases being reported in the 1948–83 period, compared with 24 for the United States and 35 for Australia from a global total of 110. As Canada, External Affairs (1983b, p. 138) rightly points out, these numbers can be misleading, given the frequent and popular alternative of negotiating bilateral restraint agreements. For example, a number of voluntary export restraint agreements have been made with Japan, the most recent being that for automobiles.

Permanent protection has become entrenched in the textile and clothing sectors. The restraints on trade in textiles and clothing have been expanded in the breadth of their coverage of both products and countries since their inception in the late 1950s. Virtually all of Canadian trade with developing countries in these products is managed now by bilateral agreements.

The United States

Labor Market Programs

The *Employment Service* (ES) in the United States is funded by federal grants to the states. It administers UI payments and maintains offices nationwide that provide placement services and advice with job search. Few resources are available for job counseling and training referrals. (Unlike Canada, the United States has no program that offers free vocational training and income support for persons referred by the ES.)

The ES has maintained an Interstate Job Bank since 1984. It is similar in purpose to the National Job Bank in Canada: hard-to-fill professional and technical jobs are listed. The system is apparently not yet fully automated, nor are state services automated.

A special adjustment assistance program (1965–68) for auto workers followed the Auto Pact. The benefits were the same as those under TAA. The program proved small (2,500 workers received $4.1m), but it has been seen as a predecessor of the 1974 version of TAA because its eligibility criteria were much weaker than the 1962 version of TAA (Canada and the United States, 1984).

Trade Adjustment Assistance

The *Trade Adjustment Assistance* program began with the *Trade Expansion Act* of 1962. It was unique for its time in specifying that eligibility for assistance required that the most important cause of worker displacement be shown to be increased imports due in largest part to tariff reductions. The program offered tax-free supplements to UI of up to 65 percent of previous income (or 65 percent of the average manufacturing wage, whichever was less), for up to one year. The benefit period was somewhat longer for those over 60 and those in training programs. Benefits were reduced 50 cents on the dollar for additional income earned.

Few workers received assistance under the 1962 provisions: in part, this was because there were no tariff reductions until the Kennedy Round cuts began in 1968, and in part because of the strict eligibility criteria. About 54,000 workers were certified between 1962 and 1975, and expenditures totaled $45.3m (Canada, 1984, p. 14).

The Trade Act of 1974 removed the connection between TAA eligibility and tariff reduction and weakened the requirement concerning the importance of trade in displacement. Trade now only had to have "contributed importantly" to job loss. Benefits were increased to 70 percent of the previous weekly wage (up to a maximum of 100 percent of the average manufacturing wage). Relocation and job search allowances were increased to cover 80 percent of costs, to a maximum of $500 for the latter. In addition, a lump-sum payment of three times the weekly wage (to a $500 maximum) was offered to those relocating (Trebilcock, 1986, p. 136).

The number of workers certified as eligible for assistance and the size of expenditures grew rapidly after 1975. In 1975, 54,500 workers were certified with expenditures of $50.4m, and the size of the program peaked in 1980, as shown in Table A–3. (Auto workers comprised more than half of those receiving assistance between 1975 and 1983; Canada and the United States, 1984, p. 14.)

Ballooning expenditures caused benefit levels to be reduced to those of UI (50 percent of the previous average weekly wage), and the combined duration of UI and TAA benefits was restricted to 52 weeks, except for those in training programs (Richardson, 1985; Lawrence and Litan, 1986). Program expenditures fell sharply in 1981 and 1982 due to these benefit reductions and to the decreased number of petitions from the automobile industry. However, increased funds were directed toward training, thus shifting program emphasis from income replacement toward reemployment services (Bednarzik and Orr, 1984, p. 26).

TAA was extended by Congress in early 1986; its future at the time of writing remains uncertain as Congress wrestles with a new trade bill. The Administration is proposing a new program (described below) to replace both TAA and current training programs targeted to displaced workers.

The experience with TAA led to a number of similar special programs in cases where government actions resulted in significant

TABLE A-3. U.S. TRADE ADJUSTMENT ASSISTANCE

			Number of Workers Receiving Other Assistance		
Year	Outlays (Mill. U.S.$)	Workers Receiving Benefits	Job Training	Job Search	Relocation
1977	149	111,000	4,339	277	191
1978	261	155,000	8,626	1,071	631
1979	264	132,000	4,835	1,181	855
1980	1,631	532,000	10,294	931	629
1981	1,449	281,000	20,651	1,491	2,012
1982	109	30,000	5,750	697	662
1983	54	30,000	11,303	697	3,291
1984	54	16,000	6,821	799	2,220
1985	53	20,000	7,424	916	1,692

JTPA Title III Funding (Mill. U.S.$)

	Formula	Discretionary	Total
Oct. 1982–Sept. 1983	82.5	27.5	110.0
Oct. 1983–June 1984	70.7	23.5	94.2
July 1984–June 1985	167.3	55.7	223.0
July 1985–June 1986	167.3	55.7	223.0
July 1986–June 1987	127.3	42.4	169.7[a,b]
July 1987–June 1988	75.0	25.0	100.0[b]

[a] Includes supplemental request of $74 million.

[b] Estimates for program years 1986 and 1987.

Source: United States, GAO (1986, p. 20).

changes in the status quo. For example, reorganizations of the railroad industry have included provisions for income maintenance and retraining. The "Redwoods" *National Park Act* (1978–84) provided income maintenance or severance pay and employment services to displaced timber workers.

Training Programs

Training programs for displaced workers began with the 1962 *Manpower Development and Training Act.* This provided special funding for the displaced, but the emphasis of the program shifted after only two years, as low income and "disadvantaged" workers became the focus of this and subsequent training programs (United States, Office of Technology Assessment, 1986).

The *Job Training Partnership Act* (JTPA) Title III of 1982 restored programs for displaced workers. It provides for federally funded state operation of retraining programs for the displaced, regardless of the cause of displacement. Counseling, training, prelayoff assistance, and placement and job search aid are among the program features. States have considerable latitude in designing their program. As Table A-3 shows, the JTPA has recently experienced sharp budget cuts, whose effects have yet to be determined.

The Administration has proposed a *Worker Readjustment Program,* which is currently before Congress. It seeks to replace TAA and JTPA (Title III) with a mostly state-run, federally funded $980m/year program. It would assist 700,000 displaced workers annually through a combination of state-supplied adjustment services (such as counseling and job search assistance, which would absorb about 30 percent of the available funds); and relocation assistance and retraining (including both institutional and on-the-job training), which would absorb about half of the program's budget. Finally, the Secretary of Labor would retain control of about 20 percent of the funds for discretionary use.

Industrial Assistance

The United States has a small number of federal programs directed toward firms. The *Small Business Administration* (SBA) provides loans, loan guarantees and management assistance to firms injured by import competition. As reported by Morici *et al.* (1983, p. 56), loans of $375m and loan guarantees of $2.74b were made in 1979.

The *Economic Development Administration* (EDA), which is now being phased out, provided technical and financial assistance to depressed areas and administered assistance to firms and communities under the TAA. Again, loans, loan guarantees and technical assistance for plant modernization, management and marketing were the instruments used. To qualify for assistance under the 1962 version of TAA, firms had to meet the requirements for escape clause protection. Thus, direct assistance to firms was an explicit alternative to temporary protection. Of the 36 firms certified between 1962 and 1975, most were in the footwear, textile and piano industries. Nineteen of these firms received $41m in assistance. Strict eligibility, lengthy application procedures and the unwillingness of lenders to provide loans limited the size of the program.

After the revision of the TAA Act in 1974, the number of firms assisted and funds increased, but the program remained limited. Direct loans were restricted to $1m per firm, and loan guarantees were limited to $3m. EDA assistance totaled $129.7m in loans, $338.7m in guarantees and $32.4m in technical aid in 1979. The TAA component of this was 15–20 percent (Morici *et al.*, 1983).

Provisions for assistance to communities (primarily through loans and grants to improve public works and attract new firms) was a new feature in the 1974 version of TAA, but no aid was ever given (Morici and Megna, 1983). The Department of Commerce reportedly encouraged trade-impacted communities to use existing programs rather than give them special treatment (Sweet, 1985, p. 51).

Industry-specific assistance exists or has existed in a number of sectors. *Shipbuilding* has been the recipient of direct subsidies, special tax treatment and credit programs. This support has been sharply reduced in recent years.

The decline of the *steel* industry has prompted both protection (the main source of aid) and some financial support. Between 1969–74, voluntary restraint agreements (VRAs) on various steel products were undertaken to give the industry time to modernize. The "trigger-price mechanism" was introduced in 1978 and lasted until 1982. Under this arrangement, steel products entering the United States below specified trigger prices initiated automatic antidumping actions. More formal restrictions on European steel exports to the United States began in 1982, and further VRAs with other countries were negotiated in 1984.

Government subsidies, tax breaks, subsidized loans and loan guarantees have been directed toward the steel industry (Trebilcock, 1986, p. 148). For example, medium-sized steel producers received special loan guarantees in 1978–79, administered by the EDA. While these were small in size compared with industry capital requirements, the effect on individual firms may have been important (Morici *et al.*, 1983).

U.S. participation in the MFA has been the chief form of assistance to the *textiles and apparel* industries. In addition to assistance available under general programs such as the SBA or TAA, the EDA administered a special program for the textiles and apparel industries in 1979. This consisted of increased financial and technical aid and an export expansion program.

The *footwear* industry has faced adjustment problems since the mid-1960s. Regional concentration and the characteristics of the labor force (low skill levels and high number of second-earners) have aggravated the problem. Administrations have responded with adjustment assistance (under TAA) and, in 1977, a four-year orderly marketing agreement (OMA) with Taiwan and Korea. A special program during 1977–80 for the footwear industry (the Footwear Industry Revitalization Progam) was operated in conjunction with the OMA. As the name suggests, its aim was to revitalize the industry and improve its international competitiveness. Funding for managerial and technical assistance, export promotion, and loans and loan guarantees was provided; $6m was contributed to technical assistance projects and $57.7m to loans and loan guarantees (Morici and Megna, 1983). Since the end of the OMA, President Reagan has refused to grant further relief.

The Chrysler $1.5b loan guarantee of 1981 was really a bail-out action and not part of an industry assistance plan. However, the auto industry as a whole benefited from the VRA with Japan. (Further details concerning safeguard and special protection are given below.)

It is worth noting that the American tradition of strict antitrust legislation continues to prohibit the use of cartels to restructure industries, a method that has been used elsewhere.

Special Protection

Escape clause protection is allowable in cases of serious injury or threat of serious injury to a domestic industry, where the most important cause of injury is import competition. A finding of injury by the International Trade Commission (ITC) does not automatically lead to relief. The decision is made by the President, who can, and frequently does, deny relief. For example, since 1975, 58 percent of petitioners have received a favorable ITC ruling, but less than half of those were granted any protection (Lawrence and Litan, 1986).

The United States has negotiated OMAs with a number of countries within the escape clause framework, but in a discriminatory way: for example, color televisions (Japan, 1977–80; Taiwan and Korea, 1979–82), nonrubber footwear (Taiwan and Korea, 1977–81).

Outside the escape clause framework, relief has been granted in a number of cases: for example, automobiles (Japan, 1981–86); carbon steel (VRAs, 1969–74, then the trigger-price mechanism, 1978–82, and further VRAs, 1984–89); and textiles and clothing (since 1957).

Other Countries

Only the briefest survey of industrial, labor market and trade policies is possible here. Attention will be focused on unusual or innovative policies elsewhere, particularly those dealing with the problems of displaced workers.

The European Community*

The movement toward the eventual formation of the EC began with the *European Coal and Steel Community* (ECSC) treaty of 1952, which sought to integrate national markets while assisting adjustment. Grants were provided for worker readaption; aid was provided to firms for restructuring. The ECSC still exists, and has taken measures in recent years as the European steel industry has declined. Minimum prices have been set, cartels sanctioned and some adjustment aid provided to workers. For example, Wolf (1979, p. 176) reports that aid for worker readaption in 1977 was 50 percent greater than the average assistance available under U.S. TAA. Some funds were also spent to attract new industry into depressed regions. (The problems of the coal and steel industries will be referred to below in descriptions of individual country experience.)

The formation of the *European Community* was expected to bring economic and political benefits. However, concerns about possible short-term unemployment and adjustment problems led to the inclusion of transitional provisions in the Treaty of Rome, which remained in effect as barriers were removed over a 12-year period.

The European Commission (a supra-national body) was empowered to authorize safeguard and antidumping action in case of serious difficulties. These measures would be limited in both extent and duration.

The permanent provisions of the treaty allowed for subsidies to industries for particular purposes (e.g., regional development). These are, however, subject to review by the commission and the member countries.

A European Social Fund was established to promote and assist geographic and occupational mobility. It contributes half of the costs of projects organized in individual countries. Retraining workers have been eligible for generous allowances, while those subsequently reemployed at lower wage rates may receive further compensation (Stein, 1984, p. 129). Expenditures have remained modest and are now used mostly for occupational training.

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*Parts of the following sections rely heavily on Chandler and Trebilcock *et al.* (1986) and Trebilcock (1986).

The United Kingdom

British policy toward adjustment problems has not, by and large, promoted adjustment. Instead of compensating labor and capital for moving out of unproductive employments, it has often tended to subsidize existing employment patterns.

Labor Market Policies

British *unemployment benefits* are available for up to one year, after which those still unemployed can receive supplementary benefits of unlimited duration. *Redundancy payments* are required by law for permanently laid-off employees with at least two years' continuous employment with the firm. Payments vary with age and length of service. Workers over age 40, for example, receive 1 1/2 weeks' pay for each year of service (up to a maximum of 20 years and a maximum weekly wage to be used in determining the payment). A national redundancy fund, to which all employers contribute, pays about 40 percent of the redundancy payment, with the firm involved paying the rest.

Employment subsidies have been used in the past to avoid layoffs. Fixed weekly subsidies on a per worker basis may be paid to firms in which layoffs of more than nine workers are planned. While these benefits (originally available for a term of 1 1/2 years) were intended to avert cyclical unemployment, the largest part of the funds of the original program (1975–79) went to the structurally depressed textile industry.

Regional development aid to firms and the provision of heavily subsidized public housing has inhibited the *geographic mobility* of the labor force. Subsidized council housing has been in chronic excess demand, and those enjoying its benefits were naturally reluctant to give them up. Rent controls have had a similar effect.

The *Employment Transfer Scheme* attempts to stimulate geographic mobility by offering a rehousing grant and moving allowances to relocating workers. Supplementary benefits are provided to workers moving from regions of high unemployment.

The *Training Opportunities Program* (1972–) supports 6 to 12 months of training in institutions or firms. An allowance for living expenses (with an earnings-related supplement) is paid to trainees, most of whom are redundant workers. However, Trebilcock (1986, p. 169) reports that the program has been relatively unsuccessful at increasing employability and in providing skills in demand.

Industrial Assistance

Regional policy has been extensively used in the United Kingdom, although its scope has been curtailed over the last decade. At its height in the 1974–79 period, about 40 percent of the labor force was subsidized by such assistance.

The *Industry Act* authorized industrial aid such as firm-specific measures (bail outs of ailing firms); sectoral programs for rationalization and restructuring; and investment subsidies to encourage large projects (a measure that has since been ended). Both firm-specific and sector-specific programs have been dominated by concerns to avoid employment decline, especially in politically important regions.

The problems of a number of troubled industries have led to important industry-specific interventions. The *automobile industry* has received assistance in the form of trade protection and government grants and loans. Chrysler was bailed out in 1975 after a company threat to close its plants. The government provided £72.5m and an additional £90m in loan guarantees. Much greater assistance has been given to British Leyland, especially after its nationalization in 1974. Despite enormous amounts of aid and a decrease in output and employment, the firm has not become healthy.

The *steel industry* has also received large-scale assistance. Most of the industry was nationalized in 1967 to form the British Steel Corporation (BSC). This intervention sought to ensure industry restructuring and modernization, while simultaneously promoting regional development. However, problems of declining demand, import penetration and out-moded plant and low productivity continued to plague the industry. Plans for restructuring were delayed again and again until closures and cutbacks began in the early 1980s.

The United Kingdom, as part of the EC, participated in EC-wide measures directed toward the steel industry, such as voluntary (later compulsory) production quotas for firms and minimum steel prices. The ECSC furnished some funds for regional development loans in areas where plants were closing. The BSC also set up its own employment service, assisting in alternative job creation and retraining.

The *shipbuilding industry* has undergone a long decline since the end of the Second World War. This prompted aid to weak firms well before the acute worldwide problems of the industry in the mid-1970s. Failure to achieve significant restructuring with the aid it received led to the nationalization of the major firms in 1977. This was followed by sharp employment and capacity reductions.

Nationalized in 1947, the *coal mining industry* has also been under pressures to contract for a long time. Many measures have been taken to ease adjustment costs: delaying closure of uneconomic pits, direct financial aid to the National Coal Board (NCB), subsidized use of coal in nationalized industries, and redundancy and relocation payments to dislocated miners. Recent closures have been accompanied by voluntary retirement benefits or transfers to other employment for those displaced. Rationalization has proceeded slowly and the NCB has absorbed huge subsidies.

France

The French approach to adjustment problems can be characterized as relatively *dirigiste*. Policy toward industry has encouraged mergers and concentration. For the most part, general labor market policies have dealt with the problems of displaced workers.

Labor Market Policy

Labor market policy in France has some distinctive features. To encourage early retirement, workers aged 60 or more may receive UI of 80 percent of their net previous wages until age 65. (Regular UI offers benefits of 60–75 percent of the previous wage up to one year.)

Layoffs require notice (varying with the size of the layoff), consultation with labor, and permission from the Ministry of Labor (Gunderson, 1986). Martin (1983, p. 84) notes that the ability and willingness of the Ministry to deny dismissal permission where the affected worker has not found a new job encourage employers to assist with job search and placement. As an alternative to layoffs, a "partial unemployment program" similar to work sharing exists. Workers are paid half of their wages for time lost below 40 hours per week.

Training programs are financed by a payroll tax (an idea evaluated by Davies, 1986, pp. 201–202). The unemployed, or those threatened by redundancy, receive financial assistance (no UI, but up to 120 percent of the minimum wage) to attend training courses.

Policy Toward Industry

Through the 1950s and 1960s, France used "indicative planning" to guide industrial development by promoting mergers and the formation of large-scale firms. Since 1978, there has been a distinct movement away from this philosophy. Assistance to industries has become more selective and has placed greater emphasis on rationalization and efficiency.

According to Trebilcock (1986, p. 245), "French policy, although inclining toward protection, has attempted medium-term strategic planning and has effectively coordinated policies towards specific sectors. It is also, however, characterized by ad hoc responses to troubled firms and industries." He claims that despite their interventionism, French policymakers successfully insulated themselves from political pressures to slow or hinder adjustments.

The *steel industry* encountered stiffer international competition in the mid-1960s. The state responded with subsidized investment funds tied to agreements with individual firms concerning mergers and investment projects. However, the resulting restructuring was insufficient to avert a crisis 10 years later. In 1978, the government prepared a rescue package calling for plant closings and sharp labor force cuts. Employment fell by almost one-third from 1978 to 1980. Political pressure resulted in lump-sum payments being made to displaced steel workers in 1979 (of about U.S. $12,500 each). Further redundancies and plant closings have continued, accompanied by provisions for early retirement, two-year retraining leave at 70 percent of wages, and regional development aid to hard-pressed areas.

The *shipbuilding industry* in France, as in many countries, almost collapsed in the late 1970s. Intervention began before this, however. The 1960s saw a government-led modernization of the industry with an employment decline of more than 25 percent. In the 1970s, the industry received heavy subsidies, which impeded major reductions in employment and capacity.

Under the protection of the MFA, the *textile industry* has become more concentrated. As in other developed countries, the French industry has shed labor and become very capital intensive. This modernization process has been industry-led, but assisted by a grant and loan program that has favored the largest firms.

West Germany

Compared with France and the United Kingdom, German policy has been relatively noninterventionist. Labor market policies seem to promote adjustment.

Labor Market Policies

Aside from special labor-management agreements during restructuring operations in troubled industries, the problems of displaced workers have been addressed by general labor market policies.

Firms planning mass dismissals within 12 months are required to inform the government and the firm's works council. If such notice is not given, the firm is required to compensate the government for its expenses in the placement and retraining of those dismissed (Bosch, 1985).

Unemployment benefits offer 68 percent of net pay earned just prior to unemployment and their duration depends on the length of time worked in the previous three years. Payments may be stopped upon refusal to relocate or enter a training program. After these benefits expire, further assistance (at 50 percent of earnings) is available indefinitely.

For those aged 60 or more and unemployed for more than one year, government-financed early retirement benefits are available. This has encouraged firms to dismiss 59-year-olds, often supplementing their UI benefits (Bosch, 1985).

Vocational training is supported by grants and loans to institutions establishing facilities. Trainees receive allowances of up to 80 percent of previous wages. There is some evidence that this training improves employability and that the skills learned are subsequently used (Trebilcock, 1986, p. 276).

The *Short-Time Allowance* program served as a type of work-sharing until its termination in 1984. It subsidized reduced working time for up to six months, guaranteeing 68 percent of net pay (i.e., the level of unemployment benefits). Eligibility required that at least one-third of the firm's work force be involved. Applicants were required to have already had four weeks of reduced work.

Mobility assistance is provided through grants to the long-term unemployed, who are moving more than 30km to new employment. These grants consist of (a) a cash incentive, (b) reimbursement for moving costs (up to a maximum level), with additions for dependents, (c) transitional allowances for living costs until the first wages are received, and possibly (d) costs of traveling to interviews.

Policy Toward Industry

About half of German industrial aid is given to regions (rather than to particular industries), as part of regional development programs. When this aid is then distributed (in the form of investment allowances and grants, for example), only "viable" investments are intended to be eligible. Banks are required both to approve industry aid applications and to be prepared to contribute a substantial portion of the required funds.

The federal government's initial response to the problems in the *steel industry* was to oppose intervention by the ECSC. It also resisted intervening itself, despite subsidization by other countries. However, by 1977 the prospect of the bankruptcy of major producers in the Saar led to intervention. A "crisis cartel" was formed, and the state and federal governments provided funds in return for the implementation of a rationalization program.

Further assistance (loans and loan guarantees) has been provided since 1982 to firms in the Saar and the Ruhr to avert mass redundancies. Restructuring plans have not been imposed by the government.

Coal mining has long received large-scale government support. Since 1968, assistance has increasingly promoted adjustment through aid for reorganization and compensation for closures.

Where job losses occur, "social plans" are often negotiated between firms and the union to try to minimize the costs of dislocation, especially for cases of total or partial closures of plants. These social plans originated in industries such as steel and mining, which are geographically concentrated and characterized by large firms and strong unions. While the provisions of these plans differ from case to case, redundancy payments (based on age, earnings and the financial condition of the firm) are a typical feature. Since 1974, a bankruptcy wages fund, which is financed by all firms, guarantees three months' wages in the event of firm bankruptcy.

Japan

The Japanese approach toward adjustment problems is generally characterized by government intervention.

Labor Market Policies

Unemployment insurance benefits are linked to participation in the public training system: extended support is available for workers undertaking retraining. This gives the government some influence in directing labor toward growing industries.

Compared with other countries, Japan has few restrictions on dismissals. The law generally requires 30 days' notice (or 30 days' pay). Large firms attempt to minimize layoffs of permanent employees by such measures as reduced overtime, the use of temporary and subcontracting workers (who may be let go in downturns), transfers to other parts of the organization, temporary loans of workers to other firms, temporary layoffs with part pay, or voluntary redundancy (Gunderson, 1986, p. 148). These measures are typically carried out only after careful consultations with unions. In this way the shipbuilding industry avoided any outright dismissals despite the closing of shipyards and the large capacity cuts of the 1970s, which halved employment in five years (from 200,000 in 1975 to 100,000 in 1979). Similarly, the steel industry avoided the use of dismissals and even early retirements for regular employees despite deep cuts in capacity by many firms.

In contrast, employees of small firms are more vulnerable. Because such firms are less diversified and cannot weather shocks to the same extent, early retirement and even dismissals are more likely. In these firms, the distinction between regular and temporary employees is not as clear as it is in the larger firms. When one remembers that small enterprises are the major employers in most industrial sectors, the image of the Japanese "lifetime employment" guarantee is somewhat diminished. Only about 20-25 percent of the labor force actually enjoys such security, according to some estimates (Anthony, 1985, p. 98).

Special measures were introduced to cope with the decline of the coal mining industry through the 1960s. By 1971, employment in the industry had decreased by more than 90 percent of its 1958 level. The transition was eased by the *Coal Miner's Assistance Law* of 1959. It encouraged the establishment of business in mining areas and provided aid to displaced workers in the form of extended UI benefits, relocation expenses, subsidized housing, and temporary employment.

The *Structurally Depressed Industries Law* of 1978 responded to problems that arose in the wake of the 1973–74 oil price increase and subsequent recession. Aluminum, shipbuilding, textile production, cement, and petrochemicals, to name a few, were declared "structurally depressed" (Trebilcock, 1986, p. 230). Employment in manufacturing (measured by the number of *regular* employees of firms) fell by 13 percent between 1974 and 1979. The 40 percent decline in textiles employment was particularly severe (Shimada, 1983).

Targeted measures have more recently been introduced for workers from industries designated as "depressed," in part to assist those laid off by smaller firms. Qualified workers may receive:

- a few months' extension of UI benefits (up to a total benefit period of one year);
- a portable wage subsidy, which pays firms hiring workers from depressed industries a proportion of the first year's salary;
- travel and living allowances, if in retraining;
- transportation and living allowances for those seeking work in another area.

These measures may be extended to all dismissed workers (regardless of industry) in particular geographic areas. This recognizes that the regional concentration of declining industries may also impose congestion costs on others in the local labor market.

Firms may also receive payments for expenses ensuing from the relocation and retraining of permanent employees. Up to one-half of the severance pay a firm gives to its laid-off temporary employees may be covered by the government.

Firms planning the dismissal of 30 or more employees (or the loan of 100 or more workers to another firm) must submit a "reemployment assistance plan" for approval to a Public Employment Security Office. (This office is the Japanese equivalent of the CECs in Canada or the ES offices in the United States; Anthony, 1985, p. 123.)

Industrial Assistance

Intervention began in *cotton textiles* after the Second World War. Through subsidization, the government encouraged the development of small production units (Frank, 1977, p. 145). Increasing competition from developing countries and synthetic textiles led to measures to encourage the scrapping of inefficient plant and equipment that began in 1956 and continued through the 1960s. Loans were made for modernization and mergers. In the early 1970s, the industry received full compensation for scrapping costs related to the government's export quota agreement with the United States (Wolf, 1979).

Shortly after this, the industry's comparative advantage showed noticeable signs of deterioration as competition from the NICs increased. Firms in expanding industries who hired displaced textile workers became eligible for fixed monthly payments for one year.

The Structurally Depressed Industries Law, mentioned earlier, allowed for the formation of capacity-reduction cartels, if two-thirds of the producers in a designated industry petitioned the Ministry of International Trade and Industry. MITI would then coordinate capacity cuts and provide funds to assist in scrapping of capacity.

The ministry would also produce a "stabilization plan" after consultation with all interested parties. This would detail the extent of the required capacity reduction and how it should be achieved. The aim of the process is to induce the exit of the least competitive firms.

Shipbuilding, which has now graduated from the "depressed" category, was organized into a cartel. All members were limited to a certain percentage of their previous peak output, and sharp capacity reductions were agreed upon. Funds for the purchase and scrapping of some shipyards were raised by loans, to be paid by all shipbuilders. This both compensates those who must exit and spreads the costs across those remaining in the industry. At the same time, government procurement and subsidized loans for domestic purchasers of ships were used to increase demand.

The *aluminum industry* formed a cartel to cut capacity, after the increase in oil prices rendered it uncompetitive. On national security grounds, the industry will apparently not be allowed to disappear. This has resulted in large subsidies to the industry.

Australia

Australia is a small, heavily protected economy with a history of chronic problems of industrial competitiveness. The general tone of policy has been to use whatever levels of protection were needed to preserve employment, rather than to emphasize policies to speed or facilitate the movement of factors from declining industries. Assistance to industry has mainly been through trade restrictions.

Only in recent years has protection fallen significantly. Garnault (1983, p. 322) estimates effective rates of assistance to manufacturing, including the effects of some QRs. The average rate declined from a level of 36 percent in 1970–71 to 24 percent in 1980–81. However, if automobiles, textiles, clothing, and footwear were excluded, the average rate would have declined from 32 to 15 percent.

From the mid-1970s, generally lower growth rates increased pressures for structural change. The rates of employment decline in textiles, clothing, footwear, and transportation equipment have exceeded that for manufacturing as a whole.

The *automobile industry* is protected by high tariffs, quotas (to be phased out and replaced by tariffs), and local content requirements. Effective assistance increased in the 1970s from 51 to 93 percent. Footwear also received increased protection through import licensing and higher tariffs after import surges in the 1970s. Textiles and clothing are protected through MFA arrangements and tariff quotas against some countries. Again, effective assistance rates increased in the 1970s, especially for clothing (Garnault, 1983).

Trebilcock (1986) reported that the "white goods" industry (refrigerators, washing machines, clothes dryers, and so on) has proven an exception to this pattern of increasing protectionism in troubled industries. There, quotas were replaced by tariffs with a timetable of liberalization (albeit to finish with a tariff of 30 percent).

Australia has experimented briefly with a labor market program resembling U.S. TAA. The *Structural Adjustment Assistance* (SAA) Act (1974–76) offered income maintenance and relocation assistance to displaced workers, and closure compensation, consultancy grants and loan guarantees to firms. Eligibility required that workers or firms establish a direct relationship between their injury and a specific government decision.

SAA was introduced after an across-the-board 25 percent unilateral tariff reduction in 1973. This tariff reduction, which heralded an important break with past protectionist policies, was followed by large employment reductions in footwear, textiles and clothing. About 10 percent of manufacturing jobs were lost in a two-year period. The perception that the tariff reductions had led to this was, in part, responsible for the program.

The income maintenance provisions of SAA were very generous: six months of benefits at 100 percent of the previous average wage (up to 150 percent of the national average wage). If a lower wage job was taken during the six-month period, a wage supplement was paid instead (Stein, 1984, p. 126). Over the two-year life of the program, 25,500 received an average of about A$2,300 each. Sixty-five percent were textile and clothing workers. Relocation assistance was received by a mere 3 workers.

Of assistance to firms, only closure compensation (85 percent of book value less residual value of assets) was actually paid; 51 firms received about A$25,500 each. Strict eligibility requirements limited the size of the program (Trebilcock, 1986).

Special Assistance to Non-Metropolitan Areas (1974–78) was a small firm-oriented program to direct aid toward areas where adjustment costs would be high due to the lack of alternative activities. Only 40 firms (mostly in TCF) received subsidies averaging A$127,500 each. These subsidies were for the phasing out of uneconomical plant and equipment, the phasing in of alternative production, or the support of existing production. However, the latter proved most common in practice (Trebilcock, 1986, p. 208).

Relocation assistance is currently available to the unemployed or those with notice of redundancy. Eligibility requires a job offer elsewhere when no suitable local applicants are available. In the early 1980s, about 2,000 individuals each year received an average of A$1,000 in assistance (Taylor and Yerbury, 1985).

Since 1982, workers in large-scale redundancy situations may be eligible for *Labour Adjustment Training Arrangements* (LATA). Special vocational training packages are put together following consultation between government, employers, unions, and the educational authorities to improve the employability of participants. UI payments and weekly training allowances maintain income during training. LATA has been kept small and directed mainly toward adjustment problems in steel, coal mining and farm equipment manufacturing; it is capable of providing aid to several thousand participants a year (Taylor and Yerbury, 1985, pp. 54–55).

Appendix B:*

Short-Run Costs of Adjustment to BFT and Other Trade Policy Changes

In this appendix we examine some of the empirical studies designed to estimate the short-run adjustment costs that result from trade liberalization. These costs are incurred as factors of production become temporarily unemployed when production and trade patterns change in response to changes in trade policy. The social costs from these adjustments could be measured as the amount of foregone output society suffers as displaced labor and capital are reallocated. If one assumes that factors are paid their marginal product, a calculation of the foregone income of the displaced factors could provide an estimate of the value of this foregone output, that is, an estimate of the short-run adjustment costs of trade liberalization.

In practice, most studies of multilateral or bilateral trade liberalization do not take such an ambitious approach. It may nonetheless be possible to gain from some of these studies a general impression of the orders of magnitude involved.

Studies for Canada

From *Williams'* (1978) study of the effects of Canada-U.S. free trade, one might conclude that adjustment costs under bilateral free trade would be relatively small. He projects fairly small changes in the relative size of each sector. Increased specialization under free trade occurs mainly within each sector; the bulk of the re-allocation of labor would be intrasectoral, which is typically less costly than intersectoral re-allocation.

Harris and Cox (1984) provide estimates of labor re-allocation between the 29 sectors of their general equilibrium model under various forms of free trade. Under unilateral free trade, about 4 percent of the labor force reallocates intersectorally. With multilateral free trade, this rises to over 6 percent. Further results reported in *Harris* (1985a) have almost 7 percent of the labor force shifting sectors under bilateral free trade with the United States. While 6 to 7 percent may not seem a particularly large figure, especially in light of the much larger shifts that will occur in any case over the decade or so during which this policy would be phased in, Harris and Cox nonetheless conclude that substantial retraining of the labor force would be required. The fact that both employment-gaining and employment-losing industries tend to be geographically concentrated (largely in Ontario and Quebec) may tend to lessen the costs of adjustment.

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*This appendix draws, in part, on Hill and Whalley (1985), Appendix A.

Like Williams, Harris and Cox also project a significant amount of intra-industry adjustment. This follows from their estimates of substantial changes in the number of plants and firms in certain industries. Labor-intensive industries seem to experience the largest employment losses.

While Harris and Cox do not attempt to quantify the actual costs of adjustment, they conclude that these costs cannot be disregarded. Appropriate adjustment policies would therefore be required both to offset these effects and to make a reduction in trade barriers more acceptable to those adversely affected.

More recently, *Harris* (1986) has examined the adjustment to bilateral free trade that would be required in Ontario. He examines a number of different liberalization methods (reduction of barriers over a 5-year or a 10-year period; slower reduction for Canada than the United States). Employment and output trends are broadly similar across scenarios.

The results suggest that Ontario output would expand and employment would increase in all sectors except primary products. (There, no trade liberalization is assumed to occur, and the workforce would decrease as its labor is bid away by other sectors with more rapid increases in productivity and wages.) Harris concludes that the positive net change in employment in nonresource sectors could ease the transitional costs of adjustment considerably. "These results can be attributed in part to the relatively large percentages of Ontario trade which are intra-industry rather than inter-industry. Thus, most manufacturing industries experience a balanced increase in both exports and imports. Underlying this is an increased level of product specialization within each industry" (p. 26). This is not to imply that intra-industry adjustment is costless. Plant closings and the exit of weak firms, combined with the expansion of strong ones, might be expected. However, the sector-specific skills of such dislocated workers would tend to retain their value. This minimizes the loss of human capital that relocating workers must bear. This is important because some empirical studies (reviewed below) have found that such human capital losses can be large, greatly outweighing the costs of temporary unemployment.

In their input-output examination of the effects on the major OECD countries of various possibilities for *multilateral* liberalization, *Cline et al.* (1978) use 1974 data to estimate the effects on employment across major product categories. Using estimates of changes in trade flows by sector (and assuming that U.S employment coefficients can be used for Canada), the authors project a net loss of jobs in export and import-competing activities in Canada. But it should be borne in mind that these are impact effects only; the effects of subsequent wage adjustment on employment are ignored. Also, an important feature of their estimates is the small size of the employment effects. Thus, in their estimates of a partial move to multilateral free trade, they project a net job loss of about 1/2 of 1 percent of total Canadian employment.

The authors also convert their estimates of the employment effects of trade liberalization into estimates of short-run labor adjustment costs. To do so, they calculate labor adjustment costs per job displaced using the average weekly wage in Canada and an assumed 30-week average duration of unemployment for an import-displaced worker. (Again, this is a U.S. figure, representing the average duration of unemployment for those receiving TAA benefits.) Multiplying this cost per job by the number of jobs displaced by imports provides an estimate of the total cost of labor adjustment. Such an estimate is very rough, however, since it omits some costs of adjustment, such as moving costs and psychic costs.

Cline *et al.* then compare this short-run cost of unemployment to estimated long-run benefits of a partial move to multilateral trade liberalization; their resulting ratio of estimated long-run welfare gains to short-run adjustment costs is about 60:1. The corresponding figure for the United States is about 80:1.

It should be emphasized that Cline *et al.* are estimating Canadian adjustment costs under *multilateral*, rather than *bilateral*, trade liberalization. Thus, they do not take into account the favorable employment effects from the "exchange of preferences" in a bilateral agreement (which, as noted in Chapter 7, may be eroded by compensation that Canada and the United States may pay third countries).

Estimates of the adjustment costs borne by certain groups of displaced workers have been done using Canadian data. *Jenkins and Montmarquette* (1979) studied displaced Montreal aircraft industry workers and found that older workers had the greatest loss in earnings. The rate of unemployment in the general labor market also had a significant effect on the amount of lost income, suggesting that congestion problems in the labor market may be important in practice.

Glenday and Jenkins (1981) studied displaced workers from certain communities in Ontario and Quebec. They found that the level of wages in new jobs can have a very important influence on total adjustment costs. Their data show that if a worker finds a job at the real wage earned previously, then income losses are relatively small. Some workers changed occupations and industries and actually received higher wages in their new job. These tended to be persons leaving low wage, labor-intensive, protected industries. However, those whose wages declined (particularly highly skilled workers losing firm-specific rents, and women) could suffer larger losses.

Studies for the United States

In a seminal paper, *Baldwin and Mutti* (1973) estimate the consequences of unilateral tariff removal in each of five U.S. industries. Using partial equilibrium techniques, the change in employment in each industry is estimated. It is then multiplied by an average duration of unemployment and then by the average weekly wage in the industry. This loss of labor income, representing foregone output as labor moves between employments, is then compared with the present value of estimated welfare gains from tariff removal. While the calculations are intended to be only illustrative, it is worth noting that their estimates suggest net gains from tariff removal in almost all cases.

Magee (1972) estimates the net gains to the United States of the elimination of all U.S. trade barriers and of all foreign barriers to U.S. exports. Using a partial equilibrium approach similar to that of Baldwin and Mutti, he calculates the jobs gained due to increased exports and the jobs lost due to increased imports. His crucial assumption is that the shift by workers both from import-competing activities and into exporting industries would involve adjustment costs because workers would not move directly from one activity to the other.

Using a wage as a proxy for the foregone output of labor and assumptions about the duration of unemployment, adjustment costs are calculated and compared with the discounted value of the estimated gains. Even with a high discount rate, estimated gains outweigh adjustment costs by about 25:1.

Using a partial equilibrium framework, *Baldwin, Mutti and Richardson* (1980) study the effects on the United States of a multilateral tariff reduction of 50 percent. Their estimates of both benefits and adjustment costs are of note because they are roughly similar to those derived for the United States by *Cline et al.* (1978). Baldwin, Mutti and Richardson use 1971 trade and tariff data for 18 major U.S. trading partners and 1967 input-output data for the United States.

Changes in labor requirements are calculated by multiplying labor coefficients from U.S. input-output data by the estimated changes in domestic output for 367 sectors. The duration of unemployment of displaced workers is estimated using the social and economic characteristics of workers in each sector. Using these durations, along with (a) estimates of the *net* change in employment in each industry due to increased imports and exports, and (b) the average wage in each industry as an estimate of the value of labor time lost, the authors calculate adjustment costs.

Their numerical results indicate that the welfare gains outweigh adjustment costs by a ratio of about 25:1. Again, the *net* employment effect—a loss of about 15,000 worker years—is fairly small relative to total employment. While there is significant unemployment and even a negative net welfare effect in some industries, the authors state that this does not imply support for maintenance of tariffs. Instead it implies that tariff reduction should be phased in gradually to ease the cost of transition.

Mutti (1978) reports further calculations for unilateral tariff reductions in five U.S. industries. Again, overall discounted benefits outweigh costs (by 1.3 to 1), and net gains are estimated in all but one of the industries. Note that this benefit/cost ratio is, as expected, much lower for Mutti's *unilateral* tariff reductions than the high 25:1 benefit/cost ratios for *reciprocal* tariff reductions cited in the studies by Magee (1972) and Baldwin *et al.* (1980).

Estimates have also been made with U.S. data to determine the private costs of adjustment borne by individual workers. This has then been compared with the compensation offered by TAA and other benefits.

Bale (1976) examines a sample of displaced workers who had received TAA benefits in the early 1970s. He calculates the loss to the worker as the wage in the previous job multiplied by the duration of unemployment, plus the present value of any loss due to a lower wage upon reemployment. (An assumption is needed here about how long this lower wage will persist.) From this loss, the value of benefits received is deducted. Depending upon the duration assumption he uses, Bale estimates a net loss to an average displaced worker of between $1,900 and $9,600 (1972 U.S.).

Monson (1978) combines Bale's estimates of social adjustment costs with Magee's estimates of welfare gains. He shows that the net gains that result are large and are similar to those initially estimated by Magee.

In a further study of individual losses, *Bale and Mutti* (1978) examine a sample of displaced shoe industry workers. They found that, if one assumed that the displaced workers face a permanent reduction in real wages over the rest of their working lives, then this loss greatly dominates their loss during the initial period of unemployment. Furthermore, UI and TAA payments would not come close to providing compensation for lower wages.

If one instead assumes that the gap shrinks (but at a decreasing rate), as in *Jacobson* (1978), these losses would be reduced. However, Jacobson finds that these losses can still be substantial for average prime age male workers in "high wage" industries. For example, his calculations show that displacement from the steel or auto industries could reduce earnings over a six-year period by about 24 percent. This figure includes both the earnings loss that results from unemployment and lower wages in a new job.

It should be recognized that while Bale (1976), Bale and Mutti (1978), and Jacobson (1978) provide interesting insights into the costs to workers who switch to lower paying jobs, they do not take into account to the same degree the benefits gained by the larger number of workers who are able to switch to *higher* paying jobs.

Conclusions

The empirical work briefly summarized here suggests that while adjustment to trade liberalization clearly involves social costs due to the displacement of factors of production, these costs are generally outweighed by the gains, and in estimates of reciprocal trade liberalization, by a substantial amount. However, the private costs borne by a displaced worker are often far from negligible. Such potential losses are one of the rationales for adjustment assistance policies.

Appendix C:[1]

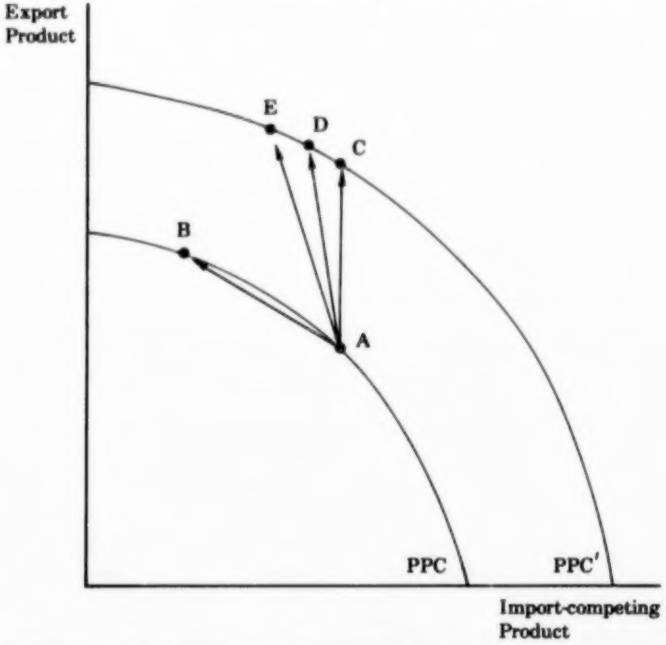
The Cost of Adjustment—Some Theoretical Issues

The cost of adjustment in a no-growth economy will exceed the cost in a rapidly growing economy. Consider each case in turn.

Adjustment in a No-Growth Economy

Suppose that initial production equilibrium is at A in the economy shown in Figure C-1. With trade liberalization, this hypothetical economy moves along arrow AB toward the new equilibrium at B. Because there is no growth, B is on the same production possibility curve as A; however, the shaft of arrow AB may lie below the PPC

FIGURE C-1. THE COST OF ADJUSTMENT



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[1] This appendix draws on and extends the analysis of Harris, Lewis and Purvis (1982, pp. 82–117).

because of temporary unemployment as labor moves from the declining import-competing industry into the expanding export industry.

Adjustment in a Growing Economy with Phased-Out Protection

In this case, a growing economy moves over an adjustment period of from, say, 5 to 10 years from A to a new equilibrium such as C on a new production possibilities curve PPC′.

Note that because of the growth in this economy, it is theoretically possible for specialization in the export sector to occur without adjustment costs. Three possibilities are shown. In the move from A to C, increased specialization in the export industry occurs without any decline in import-competing output or employment. Increased specialization occurs in the export industry because it absorbs all the new resources, not because it draws resources from the import-competing sector.

However, it is possible for there to be no adjustment costs even if there *is* a decline in import-competing output and employment, as shown in the move from A to D. This is possible as long as the decline in the import-competing sector is limited to depreciation in the capital stock and retirements in the labor force. In this case, specialization in the export industry *does* involve a shift in resources to that industry from the import-competing industry. However, no resources *currently employed* in the import-competing industry have to shift. The shift is limited to the "redirection of replacement resources" that are not employed in the import-competing industry, but instead are absorbed by the export industry.

Arrow AE indicates that even greater specialization in the export sector is possible without significant adjustment costs, provided the resources that must leave the import-competing industry in this case are limited to the "mobile margin"—i.e., those resources that can move essentially without adjustment cost. (These include, for example, labor with nonspecific skills that can shift from one industry to the other within the same city, without facing costs of retraining or relocating.)

In theory, therefore, a great deal of potential scope exists for a relative shift in resources toward the export industry without significant adjustment costs in the import-competing sector. In practice, of course, it is not this simple. In a multi-sector economy, some adjustment may be of the cost-free type described above; but in some declining sectors, the adjustment may cut deeply enough to cause substantial adjustment costs. The story illustrated above should not be used in an attempt to dismiss adjustment costs. Rather, it is designed to illustrate the various ways that a normally growing economy can accommodate a relative shift in resources at minimal cost.

It also illustrates two important principles.

(1) Growth makes the adjustment far easier. In a no-growth economy moving from A to B, there is substantial displacement of labor; workers must be laid off in the import-competing industry before being hired in the export industry. Far less of this displacement—indeed, in our hypothetical example none of this displacement—takes place if the economy is growing and moves from A to, say, C or D.

(2) Temporary protection may be useful as a means of allowing the free market to accommodate much of the adjustment in a relatively painless way. Specifically, in our hypothetical case it is temporary protection that allows the economy to move over a period of time from A to C, D or E. Without temporary protection, the economy would be forced, in an immediate "cold turkey" adjustment, from A toward B.

Even if the economy is not growing, a case may be made for temporary protection. True, with no growth, the specialization that is based on growth—illustrated in the move from A to C—will not be possible. However, specialization based on "redirecting replacement resources" will still be possible. In short, with temporary protection that allows time to adjust (in particular, through the redirection of replacement resources), the economy may move from A to B on a path that lies closer to PPC. Thus adjustment cost is reduced. While this would provide substantial economic—and perhaps even greater political—benefits, these may or may not justify temporary protection. To answer this question, these benefits would have to be compared to the cost of arriving later at higher income point B. (This same observation holds for all instances in which temporary protection is used. The economic and political benefits it brings by reducing adjustment costs must be compared to any cost that may be incurred if it delays the economy in reaching a higher income level.)

Economies of Scale

In the above analysis, specialization is based on comparative advantage, i.e., as trade is liberalized, there is increased specialization on the export product. In the Canada-U.S. case, there would also be considerable specialization based on economies of scale. If this occurs in the pattern that Grubel (1967), Grubel and Lloyd (1975) and the Wonnacotts (1967) judge as likely, then, in a growing economy, most, perhaps even all, industries may expand, with Canada specializing in certain products within each industry while the U.S. produces the rest. In this case a diagram like Figure C-1 would no longer be appropriate. In particular, one could no longer divide industries into those that export and those that compete with imports. Each industry would do both. In this case the move to free trade in a growing economy would no longer be visualized as the "move to the northwest" shown in Figure C-1, but rather as a "move to the northeast" in which broad industries expand and none need face a problem of decline. Since all the adjustment would take place within each industry, the costs of retraining and relocation would be accordingly reduced.[2]

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[2] To the degree that specialization occurs at an even lower level, within the firm, the adjustment costs may be even less. On the other hand, to the degree that economies of scale induce specialization *between* industries (and this is possible), then economies of scale would not reduce the cost of adjustment. (Indeed they might even increase it, since the possibility of a "corner solution" is increased.)

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